REPORT

TO THE

SECRETARY OF STATE FOR THE HOME DEPARTMENT,

FROM THE

POOR LAW COMMISSIONERS,

ON THE

TRAINING OF PAUPER CHILDREN;

WITH

APPENDICES.



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TO THE MOST NOBLE THE MARQUIS OF NORMANBY.

Poor Law Commission Office, Somerset House,
January 21. 1840.

MY LORD,

IN the reports which we have presented to the Secretary of State for the Home Department in preceding years, we have been careful to represent the results of our experience, as to the importance of bestowing a provident care on the training of pauper children in industry, good morals, and religion, as a means of reducing the extent of pauperism by removing the consequences of a descent from a vicious parentage or the effects of pauper nurture.

In our Report on the Continuance of the Poor Law Commission we estimated the total number of children in the workhouses as 64,570 under 16 years of age, and 56,835 children between the ages of 2 and 16. Returns subsequently collected by our Assistant Commissioners confirm the correctness of this estimate. The children are chiefly orphans, illegitimate, or deserted, or the children of persons physically or mentally incapable to discharge the duties of guardianship. We have therefore deemed it one of our chief duties to make careful inquiries respecting the arrangements for the education of pauper children in the workhouses, and we have submitted to your Lordship's predecessors reports from certain of our Assistant Commissioners, relating the proceedings which had then been adopted for the improvement of the training of this class of children.

Our attention was in an especial manner called to this subject by your Lordship early in the past year, and we then issued the following circular letter to our Assistant Commissioners, desiring them to furnish us with further information on the state of the schools for pauper children:—

Poor Law Commission Office, Somerset House,
SIR, *February* 3, 1840.

THE Poor Law Commissioners having been requested by the Marquis of Normanby to furnish a report on the state of the schools under their inspection, are desirous of obtaining, at as early a period as may suffice for the collection of accurate information, a report from you respecting the state of the workhouse schools in your district.

In collecting this information, you will consider your inquiry as directed to the illustration of the three following subjects:—

1. The state of the pauper schools before the passing of the Poor Law Amendment Act.

2. The improvements which have been introduced into the pauper schools since the passing of the Poor Law Amendment Act.

3. The further improvements which might be introduced into the pauper schools, and the obstacles to such further improvements.

In the proceedings antecedent to the formation of Unions, and immediately consequent on the election of Boards of Guardians, you may have had opportunities of observing whether any, and if so what, means were adopted by the parochial and other authorities for the separation of the children from the adult paupers, and for their training in religion, morality, and industry in the parish workhouses, and in the houses of industry of incorporations under local Acts and Gilbert's Unions; and the Commissioners consider it important that, before proceeding to state what is the present condition of the schools for the training of pauper children, you should describe the arrangements which existed for this purpose before the Union workhouses were erected.

In reporting on the present state of the schools under your inspection, it is desirable that you should ascertain whether the children educated in workhouses are so separated from the adults as to prevent their being affected by the influence of evil example in the conversation and deportment of the other inmates, and whether, among the common occurrences of a workhouse, there are circumstances unfavourable to their moral training.

The Commissioners are desirous of knowing whether well-trained teachers readily consent to accept the office of schoolmaster in a Union workhouse, and whether the difference in the nature of the qualifications required in the master of a workhouse and in a well-trained schoolmaster, and the subordination of the latter to the former, are found to be favourable to the maintenance of a good understanding between these two officers.

The number of children of an age to attend school in each workhouse forms part of the grounds on which the salaries of the schoolmaster and schoolmistress are determined. The Commissioners are desirous of knowing what is the average number of children between the ages of three and fourteen years in each workhouse of your district; what are the average salaries of schoolmasters and schoolmistresses; whether separate apartments are provided for them; with what officers they associate at meals; what measures have been adopted to secure the services of well-trained teachers; whether the guardians have been successful in obtaining such assistance; and if so, where these teachers have acquired a knowledge of the matter and methods of instruction pursued in elementary schools.

As school discipline is to a considerable extent dependent on the provision of convenient school-rooms, the arrangement of the desks, forms, and other apparatus, the selection of competent monitors and pupil teachers, the use of appropriate school registers, and other matters of organization, these subjects will be reported on by you as necessary to an estimate of the efficiency of the existing schools.

You are requested to state generally, the ages, previous occupations, qualifications, character, and conduct of the teachers who have been employed; the extent and quality of the instruction which they have given to the children; the methods by which it has been imparted; the nature of the books used in the schools, and their fitness for their several purposes; to what extent the children have been instructed in industry, distinguishing the boys' and girls' department; what exercises are adopted to promote health and cheerfulness; what has been the character of the discipline of the school; whether distinction depends on intellectual

proficiency only, or on a combination of intellectual with moral development, or on moral conduct only; whether corporeal punishments have been resorted to; whether rewards have been given; and what expedients have been adopted for the moral training of the children.

The results of an improvement in the education of the children may be in some degree estimated by the diminution of the frequency or total discontinuance of the apprenticeship of pauper children. You are, therefore, requested to state to what classes the children in the workhouses of your district belong, arranged under the heads of the subjoined table; at what age the children generally leave the workhouse; to what occupations they are commonly sent; what is the outfit in clothes given with an orphan or friendless child; whether any and what premium is granted, or if any subsequent aid in clothes is afforded; whether the children frequently return from service to the workhouses, and what is known of their general conduct and character after leaving the workhouse.

If the guardians of your district have been successful in securing the services of any well-trained teachers, the Commissioners will have great interest in receiving any accounts which you may be able to furnish of the results of the labours of these teachers in the improvement of the discipline and instruction of any of the workhouse schools, and especially of the consequences of their management in rearing the children in religion, morality, and industry.

Signed by order of the board,

E. CHADWICK, *Secretary*.

______________ UNION.

		In workhouse.	With contractor.
1. Bastards	Boys		
	Girls		
2. Orphans	Boys		
	Girls		
3. Children deserted by father .	Boys		
	Girls		
4. Children deserted by mother, and whose fathers are resident out of the Union workhouse but have not deserted them	Boys		
	Girls		
5. Children deserted by father and mother	Boys		
	Girls		
6. Children of men undergoing punishment for crime . . .	Boys		
	Girls		
7. Children of persons dependent on parochial aid on account of mental or bodily infirmity . .	Boys		
	Girls		
8. Children of able-bodied widows resident in Union workhouse .	Boys		
	Girls		
9. Children of able-bodied widows resident out of Union workhouse	Boys		
	Girls		
10. Children of able-bodied widowers resident in Union workhouse .	Boys		
	Girls		
11. Children of able-bodied widowers resident out of Union workhouse	Boys		
	Girls		
12. Children of able-bodied parents who are resident in the Union workhouse with their children	Boys		
	Girls		
13. Children belonging to large families of able-bodied fathers admitted into the workhouse as relief to parents	Boys		
	Girls		
14. Children not included in either of the above classes	Boys		
	Girls		

In reply to this circular we have received several reports from our Assistant Commissioners, from which we have selected those which appear to us to give such information as to enable your Lordship to form a correct opinion of the condition of the schools in workhouses in different parts of the country.

The measures to be adopted for the improvement of these schools had occupied much of our attention in preceding years, and we have therefore considered it expedient to lay before your Lordship certain of the reports of our Assistant Commissioners, which have already been presented to Parliament, but which it

appears to us desirable to transmit to you, as they contain a narrative of the efforts which have been made to improve the training of pauper children, and of the difficulties which have been encountered. These reports mark the successive steps in our experience, by which the importance of establishing District Schools for the training of pauper children (as recommended in the Report of the Committee of the House of Commons) has become more apparent. We have in the reports of preceding years stated our conviction that this arrangement is necessary to the right regulation of the training of this class of children, which, as long as it is conducted in workhouses, must necessarily be very defective.

The schools in workhouses often fail to produce satisfactory results, because it is difficult to provide efficient masters and mistresses for such schools. An adequate salary is not usually granted by the Boards of Guardians to the superintendents of schools containing only a small number of children, and, even when a larger salary is offered, well-trained masters and mistresses are generally unwilling to accept a situation subordinate to that of the master of the workhouse, and to live within the walls of the house, subject to the restrictions inseparable from such a situation. The arrangements for the instruction of the children in industry in small workhouse schools are generally imperfect, because the expense of rendering them efficient would be greatly disproportionate to the number of children to be instructed.

Similar considerations often deprive the schools of the means requisite for success in other departments of instruction.

Though our Assistant Commissioners describe in their reports many improvements which have been effected in the management of the schools for pauper children, as compared with the corruption to which these children were exposed in the workhouses of parishes and Incorporations before the passing of the Poor Law Amendment Act, and the almost invariable neglect even of instruction then prevalent, yet they advert to various considerations of general policy, showing it to be undesirable that the pauper children should be reared in workhouses.

The moral and religious influences of education are not we fear without many obstructions when the school is within the workhouse, even when it is conducted by an efficient teacher; but under ordinary circumstances, when the deficiencies of the schoolmaster are combined with the pernicious influence of the associations inseparable from residence in a workhouse inhabited by a class whose indigence is often the sign of a low moral condition, we are convinced that we cannot hope for much beneficial influence from the school on the future characters and habits of the children, and we fear much evil and disaster may ensue. The children in workhouses, even in those in which the classification is maintained with the greatest strictness, are more or less associated with the women. The adult single women in the house have often children whom they are of course permitted to see, and the girls cannot learn any domestic duty without coming occasionally in contact with this class, who are much employed in household work. Such associations, even where much vigilance exists, are, we are convinced, polluting. A workhouse cannot, with the greatest attention to classification, be made a place in which young girls can be removed from the chances of corruption. These evils are faithfully represented in the report of Mr. Tufnell and of our other Assistant Commissioners. Under these circumstances, evidence was presented to the Committee of the House of Commons on the importance of establishing District Schools, in which the orphan, illegitimate, and deserted, and children of idiots, felons, and persons physically disabled, might be reared in religion and industry, by masters and mistresses trained for the discharge of parental duties to these outcast and friendless children. The Committee recommended to the House of Commons a combination of Unions for the establishment of District Schools, and our subsequent experience abundantly proves that such an arrangement is necessary to the success of our efforts to place these children in a career of virtuous and successful industry.

Some apprehensions of an increased expense consequent on the adoption of these proposals are, we conceive, attributable to the erroneous notion that new buildings will be required for these

District Schools. We are, on the contrary, convinced that in most, if not all cases, arrangements may be made for the establishment of such schools, without incurring the expense of the erection of new buildings. In almost every district of convenient size, a workhouse, abandoned on the formation of some Union (or which might be relinquished on the adoption of these arrangements), would be available for the reception of the children. Where such a building does not exist, there are few districts in which an old mansion might not be procured for a small rental. By these and similar expedients we are convinced that convenient arrangements might be made for assembling the children of many Unions in a District School with little expense.

The great majority of pauper children maintained in workhouses have no near relatives, or have been deserted by them, or are the offspring of felons and persons physically or mentally incapable of guardianship, or are illegitimate. Their removal to a District School, therefore, is not open to the objection of an interference with any natural sympathies. The success which has attended the attempt to improve the District Schools in the neighbourhood of London, likewise proves how much they promote the settlement of the children in service, at an earlier period than heretofore, and in more eligible situations. Mr. Weale reports that the guardians of fourteen Unions in his district have passed resolutions that a combination of Unions for educational purposes is worthy of the attention of the Legislature.

We do not consider it necessary in this place to recapitulate the details of the arrangements by which we have proposed to accomplish these objects, as they have been the subject of former reports, and as we have not to submit to your Lordship any change in the recommendations which we have previously made.

A considerable portion of the Reports of our Assistant Commissioner, Dr. Kay, consists of an account of the effect which the improvements in the training of pauper children in industry, morality, and religion, which have been effected in the metropolitan districts, have had in procuring for these children eligible situations in domestic service, and in handicraft trades,

and in greatly diminishing the frequency of their relapse into a condition of dependence. These consequences are examined in connexion with the gradual disuse of the system of granting premiums with pauper apprentices, and the substitution of a contract for hiring and service, in lieu of an indenture of apprenticeship.

The abuses of the system of apprenticeship with premiums are exposed, and recommendations are made for the improvement of the system adopted for placing children in service, and securing their success in life, which will have our immediate attention.

We are engaged in considering the most effectual means of preventing a recurrence of the various abuses described, which, though greatly diminished in number, will require for their effectual restraint the interference of our authority.

We also desire to draw your Lordship's attention to a Report from Dr. Kay on compulsory apprenticeship in Norfolk and Suffolk, as placing in a strong light the consequences which ensued from carrying into practical execution the principles on which the system of apprenticeship was established.

In connexion with the evidence afforded by the experience of our Assistant Commissioners, of the benefits derivable from well-devised arrangements for the training of pauper children in the duties of the station of life which they may hope to fill, we submit to your Lordship some important evidence collected by Mr. Chadwick, illustrating the increased value of the labour and skill of artisans from an education suited to the wants of that class. The nature of the evil which deprives our workmen of the full advantage they might derive from their comparatively high wages; the social and economical advantages which result from the humanizing effects of education; and its direct influence on the value of labour, are well illustrated by this evidence.

We have also the satisfaction to furnish your Lordship with a detailed Report from Dr. Kay and Mr. Tufnell on the steps which they have taken, with our sanction and approval, for the establishment of a Training School for the masters of schools for pauper children in workhouses, and of District Schools.

The successful result of the exertions made by Dr. Kay and Mr. Tufnell, afford an encouraging prospect of the advantages to be derived from the training of pupils for masters of schools, and we trust that this account of their proceedings will be found to merit your Lordship's serious attention.

We have the honour to be,

My Lord,

Your Lordship's obedient and faithful servants,

JOHN GEORGE SHAW LEFEVRE,
GEORGE NICHOLLS,
GEORGE CORNEWALL LEWIS.



I.

EVIDENCE OF EMPLOYERS OF LABOURERS ON THE INFLUENCE OF TRAINING AND EDUCATION ON THE VALUE OF WORKMEN, AND ON THE COMPARATIVE ELIGIBILITY OF EDUCATED AND UNEDUCATED WORKMEN FOR EMPLOYMENT.

Taken by EDWIN CHADWICK, Esq., Secretary to the Poor Law Commission.

ALBERT G. ESCHER, Esq.

You are an engineer residing at Zurich?—Yes: I am one of the partners of the firm of Escher, Wyss, and Co. of Zurich.

What opportunities have you had of observing the moral and intellectual condition of working men, the natives of different countries, differently educated?—We employ from six to eight hundred men in our machine-making establishment at Zurich: we also employ about two hundred men in our cotton mills there; about five hundred men in our cotton manufactories in the Tyrol and in Italy. I have occasionally had the control of from five to six hundred men engaged in engineering operations as builders, masons, &c., and men of the class called navigators in England.

Are the working people whom you employ, or have employed, in Switzerland, natives of that country?—No: partly Swiss, partly Germans of all the different states,—Saxons, Wurtemburghers, and others; partly French, some few Danes, some Norwegians, some Polanders, some Bohemians, some Hungarians, some English and Scotch, and some Dutch.

Have the numbers of the different classes of workmen and the constancy of their employment been such as to enable you to discern their national characteristics?—Yes; I think I have had very full opportunities of distinguishing their various characters, which I have had moreover opportunities of observing and studying in their own countries, in several of which I have conducted works.

Do you find these various classes distinguished by various conditions of natural intelligence, or of quickness and perspicuity of understanding?—Yes: I find very great differences amongst them.

In what order do you class the workmen of various nations in respect to such natural intelligence as may be distinguished from any intelligence imparted by the labours of the schoolmaster?—I class the Italians first; next the French; and the northern nations very much on a par.

Do you include the English as of the northern family?—Yes, I do.

What are the more particular natural characteristics of the several classes of workmen?—The Italians' quickness of perception is shown in rapidly comprehending any new descriptions of labour put into their hands, of quickly comprehending the meaning of their employer, of adapting themselves to new circumstances, much beyond what any other classes have. The French workmen have the like natural characteristics, only in a somewhat lower degree. The English, Swiss, German, and Dutch workmen, we find, have all much slower natural comprehension.

What, however, do you find to be the differences of acquirements imparted by specific training and education?—As workmen *only*, the preference is undoubtedly due to the English; because as we find them they are all trained to special branches, on which they have had comparatively superior training and have concentrated all their thoughts. As men of business or of general usefulness, and as men with whom an employer would best like to be surrounded, I should, however, decidedly prefer the Saxons and the Swiss, but more especially the Saxons, because they have had a very careful general education, which has extended their capacities beyond any special employment, and rendered them fit to take up, after a short preparation, any employment to which they may be called. If I have an English workman engaged in the erection of a steam-engine, he will understand that and nothing else; he will understand only his steam-engine, and for other circumstances or other branches of mechanics, however closely allied, he will be comparatively helpless to adapt himself to all the circumstances that may arise, to make arrangements for them, and give sound advice or write clear statements and letters on his works in the various related branches of mechanics.

Will the workman with the better general education, or the Saxons with the same special opportunities as the English workman, get before him?—In general he will. The Saxon or the educated workman will under the same circumstances much sooner advance and become a foreman or manager. In other words, he will be found by his employer more generally useful.

But is the superior general usefulness of the Saxon, or workman of superior education, accompanied by any distinction of superiority as to moral habits?—Decidedly so. The better educated workmen we find are distinguished by superior moral habits in every respect. In the first place, they are entirely sober; they

are discreet in their enjoymens, which are of a more rational and refined kind; they are more refined themselves, and they have a taste for much better society, which they approach respectfully, and consequently find much readier admittance to it; they cultivate music; they read; they enjoy the pleasures of scenery, and make parties for excursions into the country; they are economical, and their economy extends beyond their own purse to the stock of their master; they are consequently honest and trustworthy. The effects of the deficiency of education is most strongly marked in the Italians, who, with the advantage of superior natural capacity, are of the lowest class of workmen, though they comprehend clearly and quickly, as I have stated, any simple proposition made or explanation given to them, and are enabled quickly to execute any kind of work when they have seen it performed once; yet their minds, as I imagine from want of development by training or school education, seem to have no kind of logic, no power of systematic arrangement, no capacity for collecting any series of observations and making sound inductions from the whole of them. This want of the capacity of mental arrangement is shown in their manual operations. An Italian will execute a simple operation with great dexterity; but when a number of them are put together all is confusion; they cannot arrange their respective parts in a complicated operation, and are comparatively inefficient except under a very powerful control. As an example of this I may mention that within a few years after the first introduction of cotton spinning in Naples, in the year 1830, the spinners produced twenty-four hanks of cotton yarn from No. 16 to 20 per spindle, which is equal to the production of the best English hands; and yet up to this time not one of the Neapolitan operatives is advanced far enough to take the superintendence of the operations of a single room, the superintendents being all northerns, who, though much less gifted by nature, have obtained a higher degree of order or arrangement imparted to their minds by a superior education. This example is derived from a new branch of industry; others have come within my experience in branches of industry in which the Italians excel, such as in masons' work. I look on the Neapolitans individually as being the most skilful masons in Europe. When, however, they are employed in numbers and concentrated masses, the same want of what I call logical arrangement again becomes perceptible, and I have constantly been obliged to employ as superintendents, northerns, such as the better educated Swiss and Germans, who, though inferior in personal ability, were from education fit to arrange and control the work with forethought and system. These observations apply to the Neapolitan workmen. Those in the north of Italy, chiefly in Lombardy, who have a comparatively better education, from a forethought and arrangement to their natural capacity, and in

those employments in which they have experience, such as agriculture, road-making, and canal-digging, they are equal, if not superior, to the workmen of any nation, as must be evident to those persons who observed the skill and expedition with which *the Alpine passes, and that masterpiece of civil engineering, the* road along the Lake of Como, and other similar works, were executed.

Are the Lombards higher in the scale of morals than amongst the Neapolitans?—Yes, decidedly higher; although the education in Lombardy is not in any wise to be spoken of as high, but only as of a higher order than the Neapolitan.

Have you had any Scotch workmen in your employment?—Yes, we have had several, and have had others.

What are their characteristics?—We find that they get on much better on the continent than the English, which I ascribe chiefly to their better education, which renders it easier for them to adapt themselves to circumstances, and especially in getting on better with their fellow-workmen and all the people with whom they come in contact. Knowing their own language grammatically, they have comparatively good facility in acquiring foreign languages. They have a great taste for reading, and always endeavour to advance themselves in respectable society, which makes them careful of their conduct and eager to acquire such knowledge as may render themselves acceptable to better classes.

Do you find these Scotch workmen equal to the Northern Germans and Saxons?—As workmen they may, on account of their special and technical education, be superior, but as men in their general social condition they are not so refined, and have lower tastes; they are lower in school education, and have less general information than the Saxons or other Northern Germans.

In what system of education have the Saxons been brought up?—In the Prussian system, or one similar, which is also the system in which the younger people in Switzerland are brought up.

In the free Cantons of Switzerland is the education national and compulsory?—In the Protestant Cantons it is entirely so. No child can be employed in any manufactory until it has passed through the primary schools; and it is further under the obligation of attending the secondary schools until its sixteenth or seventeenth year of age. And under all circumstances, and for every description of employment, it is obligatory on parents to send their children to the public schools until they are absolved from the obligation by an examination as to the sufficiency of the education.

Are the observations you have made on the Saxons applicable to the Prussian workmen generally?—From what I have heard, and from some few opportunities I have had of observing them, I believe they are; but my opportunities of observation as to the

Prussians have not been ample. The Prussians very seldom leave their country.

What are the characters of the Dutch workmen whom you employ?—Those workmen whom we employ are all shipbuilders; they are like the English quite specially trained, but their education is not of a very high order, but very sound and decidedly superior to the English. It is an education in which economy, domestic and public respectability of conduct, is particularly enforced; and we have found them to be particularly honest, economical, orderly, and trustworthy men.

In respect to order and docility what have you found to be the rank of your English workmen?—Whilst in respect to the work to which they have been specially trained they are the most skilful, they are in conduct the most disorderly, debauched, and unruly, and least respectable and trustworthy of any nation whatsoever whom we have employed, (and in saying this I express the experience of every manufacturer on the continent to whom I have spoken, and especially of the English manufacturers, who make the loudest complaints.) These characteristics of depravity do not apply to the English workmen who have received an education, but attach to the others in the degree in which they are in want of it. When the uneducated English workmen are released from the bonds of iron discipline in which they have been restrained by their employers in England, and are treated with the urbanity and friendly feeling which the more educated workmen on the continent expect and receive from their employers, they, the English workmen, completely lose their balance: they do not understand their position, and after a certain time become totally unmanageable and useless. The educated English workmen in a short time comprehend their position, and adopt an appropriate behaviour.

Skilful workmen in England being often distinguished for their debauched habits, it has been supposed that their habits of excess were only the manifestation of the spirit to which their superiority as workmen was attributable, and that any refinement produced by education would be injurious to them as workmen, rather than otherwise. Is such an opinion conformable to the conclusions derivable from your own experience or observation? —My own experience, and my conversation with eminent mechanics in different parts of Europe, leads me to an entirely opposite conclusion. In the present state of manufactures, where so much is done by machinery and tools, and so little is done by mere brute labour (and that little is diminishing), mental superiority, system, order, and punctuality and good conduct—qualities all developed and promoted by education—are becoming of the highest consequence. There are now, I consider, few enlightened manufacturers who will dissent from the opinion, that the workshops

peopled with the greatest number of educated and well-informed workmen will turn out the greatest quantity of the best work in the best manner.

What are the characters of the English workmen as inhabitants, and how are they received by the inhabitants of Zurich?—The uneducated English workmen were so disagreeable as lodgers, having such disorderly and bad habits, spoiling the rooms, emptying vessels out of the windows, offending the people in the streets, and contravening the police regulations, and rendering their interference necessary for the preservation of the peace, that they find it difficult to get lodgings, and are obliged to pay more for them. Such extra charges they call impositions. I am sorry to say that some of the best description of the English workmen,—one of the most superior of the English workmen, to whom we gave 5*l.* a-week wages, had so lowly bred and educated a family (he came from Oldham, where they are notorious for the want of education) that this salary scarcely sufficed for his expenses—do not take so high a standing as foreign workmen who only receive 50*l.* a-year. We had the greatest difficulty to procure for himself and his family lodgings; and we have had constant complaints respecting the family from the landlords, such as we have never had respecting any foreigners. I am far from saying that we have no disorderly or debauched foreign workmen, but these always belong to a lower educated, a lower skilled, and a lower paid class. When foreign workmen rise in pecuniary condition to those on equality with the English workmen, they always rise in respectability of condition and behaviour. A Saxon or Swiss foreman, or overlooker, with 120*l.* a-year, will be with his family respectably dressed, live in a respectable house, and his table will be provided with good though simple food; his children will be well educated, he will himself frequent museums or casinos, or other respectable and comparatively intellectual places of resort, and lay by perhaps 20*l.* a-year; whereas an English overlooker of the lower description will live in a less respectable manner in every way; he will live in a worse house, that house will be dirtier, he will frequent common wine-houses, and be consequently in a much lower scale of society, and expend at least 150*l.* a-year; and when work fails he will be in a state of destitution. From the accounts which pass through my hands, I invariably find that the best educated of our work-people manage to live in the most respectable manner at the least expense, or make their money go the furthest in obtaining comforts. This applies equally to the work-people of all nations that have come under my observation; the Saxons, and the Dutch, and the Swiss being, however, decidedly the most saving, without stinting themselves in their comforts, or failing in general respectability. With regard to the English, I may say that the educated workmen are the only ones

who save money out of their very large wages. By education I may say that I throughout mean not merely instruction in the arts of reading, writing, and arithmetic, but better general mental development; the acquisition of better tastes, and of mental amusements and enjoyments which are cheaper, whilst they are more refined. The most educated of our British workmen is a Scotch engineer, a single man who has a salary of 3*l*. a-week, or 150*l*. per year, of which he spends about one-half; he lives in very respectable lodgings, he is always well dressed, he frequents reading-rooms, he subscribes to a circulating library, purchases mathematical instruments, studies German, and has every rational enjoyment. We have an English workman, a single man, also of the same standing, who has the same wages, also a very orderly and sober person; but as his education does not open to him the resource of mental enjoyment, he spends his evenings and Sundays in wine-houses, because he cannot find other sources of amusement, which presuppose a better education, and he spends his whole pay, or one-half more than the other. The extra expenditure of the workman of lower education of 75*l*. a-year arises entirely, as far as I can judge, from inferior arrangement, and the comparatively higher cost of the more sensual enjoyment in the wine-house. The wine-houses which he frequents may be equivalent to the better public-houses in England.

Do you ever detect any pilfering amongst your work-people?—Comparatively infrequent, and when we do, it is invariably amongst the class which is the lowest in education.

Do you change your English workmen more frequently than any other class?—Yes; the uneducated ones, those who have no education invariably get into bad habits in a very short time, and we are in consequence compelled to change them very frequently, which is not at all our general practice.

[NOTE.—Mr. Escher, shortly after giving the above information, returned to Zurich with his wife, an English lady whom he had recently married. On their arrival they were welcomed by the great body of his workmen, who spontaneously assembled, and presented him with a well-written congratulatory address. Parties of the workmen of each nation made marriage presents, consisting of some piece of art or specimen of skill in their respective branches of workmanship; the English workmen alone looked idly on and offered no mark of attention or civility.]

JAMES KEMPSON, of Philadelphia, Cotton Manufacturer—examined.

With what extent of manufactures have you been conversant in America?—I have been acquainted with the manner of conducting manufactures in most of the manufacturing states.

What number of workmen do you employ in your manufactory?—Above four hundred.

What proportion of the persons employed are natives of the United States?—Throughout New England, which are considered the manufacturing states, above eight-tenths of the persons employed are natives of the United States.

Are many of the remaining two-tenths English workmen?—The greater proportion of them; but as a general rule they do not like to take English workmen in the New England factories.

Why do they not like the English workmen?—Because they are so dissipated and so discontented.

Is this their general character in the United States?—Yes; after they have been some time in the country they are noted as the greatest drunkards we have. The wholesale price of whisky is with us ninepence a gallon; and they appear not to be able to overcome the temptation. Our own workmen are better educated, and more intelligent, and more moral, and refrain more from sensual indulgence.

How does the discontent of the English workmen of which you have spoken usually manifest itself?—In the workmen becoming masters, in strikes and demands for wages, almost always ill-considered, with which the masters cannot comply, and which grievously interfere with his commercial operations; their ignorant expectations generate ill-will and hostility towards the masters.

Are there no combinations to keep up wages in America?—None amongst the American cotton manufacturers.

Are there no combination laws?—None.

To what do you attribute this state of things amongst the American workmen?—To their superior education, to their moral instruction, and to their temperate habits.

Have you any national system of education?—We have public schools, supported partly by state funds, and partly by bequests. All children have the privilege of attending.

Do they, in point of fact, very generally attend in the manufacturing states?—They universally attend, and I think that information is more generally diffused through the villages and the whole community of the New England states, than amongst any other community of which I have any knowledge.

What is the general view taken of these schools by the manufacturers and persons of wealth in America?—From their experience they deem them of the greatest importance to the welfare

of the state. They are encouraged by the state governments, and all the leading persons of the state.

How do the children whom you employ obtain education?—The manufacturers are always anxious that the children should absent themselves from the manufactory during two or three months of the year to attend the schools. The manufacturers very frequently suggest to the parents the necessity of the children being taken to school. The sending the children to school is generally an inconvenience to the manufacturer.

Is the inconvenience of the children going to the school such as to increase the cost of production?—I do not think it does increase the cost of production; the only inconvenience is the trouble of getting other hands; we think the advantage of their being educated more than counterbalances that trouble.

William Fairbairn, Esq.

You are an engineer?—Yes.

You have an establishment in which you employ a considerable number of mechanics?—Yes, I have my own manufactory in Manchester, and I am partner in the firm of William Fairbairn and Co., having another establishment in London.

What number of workmen do you employ?—About 680 in Manchester, and between 400 and 500 persons in London. This number includes apprentices; we have a few labourers: the principal part of them are mechanics in London.

Are the mechanics natives of London, and those in this establishment natives of Manchester?—No, they are from all quarters both in London and Manchester; a great number of them are Scotch; there are many from Yorkshire; a very limited portion of the mechanics, perhaps not more than 7 or 8 per cent., are Irish.

What descriptions of education—school education, or domestic training—do the chief classes of mechanics appear to have had so far as you have the means of knowing?—The mechanics who come from Scotland, and the north of England, Cumberland, and Northumberland, have generally received a tolerably good elementary education. Those from Scotland have been generally educated in the parochial school; they read and write; they are in general good arithmeticians, and in many instances they have a knowledge of the lower branches of mathematics; some of them draw very well. The English workmen from the northern counties are similarly, but variously, and not so well educated as the Scotch, and I attribute it to the want of parochial schools, which in my opinion are invaluable in Scotland. The Irish mechanics

that we have here are chiefly from the north of Ireland, and in point of school education they rank very nearly with the mechanics from the English northern counties, though they are somewhat lower in technical training as mechanics. The mechanics from Yorkshire, Lincolnshire, and the south of England are below those of the northern counties, though they are very good mechanics.

Are you aware whether in the northern counties in England, from which the better educated mechanics come, that better education arises from endowed schools, or from the better management of any endowed schools of the nature of the Scotch parochial schools, or whether it arises from education obtained by the population in consequence of their perception of the advantages of education?—The better education in the counties of Durham and Northumberland does not arise from endowed schools, but from schools conducted on the Scotch parochial principle, and supported by the fees paid by the scholars, as also from the amalgamation of that part of the English with the Scotch population on the borders, and a similarity of habit or impression respecting the advantages of education. The parents of children in those counties are very generally aware of the advantages of the Scotch system of education.

You are perhaps aware that the economy of a Scotch, an Irish, or a Northumberland, or Yorkshire cottage is different from the rest; have you observed whether, as respects the habits of the workmen in respect to dress or personal cleanliness as derived from domestic training, independently of school instruction, there are great differences observable amongst the several classes of educated mechanics?—I observe amongst the better class of Scotch workmen who have come out of, probably, very inferior cottages, a strong disposition to advance in self-respect in proportion to their better education. They have more self-respect, which is shown in cleanliness and better dress on Sundays. It is always an indication of looseness of character, and a low standard of moral conduct, to see a mechanic in dirt or in his working clothes on Sunday. Thirty years' experience leads me to draw a very unfavourable conclusion as to the future usefulness to me, and of success to himself, of any workman whom I see in dirt on a Sunday.

As a general rule, does the advance of his house keep pace with the advance in the condition of the person?—As a general rule it does. Better personal condition leads to better associates, and commonly to better marriage, on which the improved condition of the house is entirely dependent. It is due to the labouring classes of females in Lancashire and the surrounding districts to state, that in the important household virtue of cleanliness they are superior to the females of the same class in Scotland.

What are the differences which you have observed or experienced in the usefulness of workmen as shown in mental habits apparently derived from school education?—The best educated are invariably intrusted with the most important parts of the work; the Scotch workmen first, then the workmen from the northern counties. If there be any intricate work in anything that requires close mental application, as a class we always select the men of the best school education first. In out-door work, when, for example, there is a steam-engine, or a water-wheel, or mill-work to erect, a foreman or some responsible workman must be chosen, and the choice in nine cases out of ten falls on the man of the best school education. It is then found to be very useful to have a man capable of making a drawing, taking dimensions, or sending a letter.

Does the rate of wages keep pace with the education?—Yes, the best educated are always the best paid.

Are not the operations of your manufactory frequently changed? —Yes, very frequently; we seldom have precisely the same work over again, except in the case of steam-engines. Our operations extend over great varieties of manufacture—cotton-mills, wool, or flax—and all these require various adaptations of the transmission of moving power, and of its velocities according to the situation.

In respect to change of operations, do you experience any advantages traceable to the school education of the best workmen?—Yes, we certainly find that those who have had a good school education have had a better conception of the organization and system implied in change of operation. It appears to require mental training in early life to enable a man to arrange a sequence of operations in the best manner for clear and efficient practical efforts. Men with such capacity we rarely find, except amongst those who have had a school education. Occasionally self-educated men arise who, under the influence of strong motives, do more for themselves than any existing methods of school education could have done for them; but these men are extremely rare; they are but solitary instances.

In the manual operations do you perceive any differences of skill traceable to school education?—No, not in the lower divisions of labour, or working at particular parts; some of the least educated mechanics are often extremely good workmen; the manual operation is one requiring training in itself. The combination of parts is an operation effected by school education.

In respect to the relation of master and workmen, have you experienced or observed any important differences between the educated and uneducated workmen as to pecuniary dealings in questions respecting wages?—In all questions respecting wages we always find the best educated workmen the most reasonable in their demands, and the most peaceable in their behaviour, most

readily assenting to proper changes, whether for or against themselves. An extensive employer of labour having a desire to improve the condition of the working classes may frequently have to propose changes, really of no advantage to himself, but for their benefit; but which ignorant and uneducated workmen, in the blind jealousy which they are accustomed to entertain, oppose as strongly as if they were changes to their disadvantage. This is not unfrequently the case. It is of great importance to strengthen the relations between the master and the man. The relation between the educated workman and the employer is generally much stronger than between the uneducated workman and his employer.

In the relation of workman and workman or man and man in the same shop, have you observed any characteristic differences between the educated and the uneducated workmen?—Yes: it is observable that those who have received a school education associate together, as might be expected, from similarity of tastes and pursuits; the best educated are the most peaceable, and work the most pleasantly together. During the last eight years I am unaware of the occurrence of a single fight amongst any of my workmen; on the whole, their conduct has been highly praiseworthy.

Are you aware of what is the condition of their houses? Have you visited them?—I have not made it a practice to visit them. I chiefly judge of their circumstances from seeing them with their wives and families, and their well-dressed and respectable condition on the Sundays. These externals are always indications of greater comforts and respectability at home. I am a strong advocate for dress, and encourage the working men to dress well. If I see any workman in a dirty condition and in his working clothes in the streets on the Sunday, I do not, perhaps, speak to him then, but on the Monday I tell him that I have been looking over the books, that I find that he has had as good wages as other men who dress respectably, and that I do not like to have any one about me who will not dress well on the Sunday. This intimation has generally had the desired effect.

What are their habits in respect to sobriety?—I may mention that I strictly prohibit on my works the use of beer or fermented liquors of any sort, or of tobacco. I enforce the prohibition of fermented liquors so strongly, that if I found any man transgressing the rule in that respect, I would instantly discharge him without allowing him time to put on his coat.

Have you any peculiar grounds for adopting this course?—No: but as respects myself I wish to have an orderly set of workmen; and in the next place I am decidedly of opinion that it is better for the men themselves and for their families.

Are you aware that it is a prevalent opinion that strong drink

is necessary as a stimulus for the performance of labour?—I am aware that that was a prevalent opinion amongst employers of labour; but it is now very generally abandoned: there are, nevertheless, some foundries in which there is drinking throughout the works all day long. It is observable, however, of the men employed as workmen that they do not work so well; their perceptions are clouded, and they are stupified and heavy. I have provided water for the use of the men in every department of the works. In summer-time the men engaged in the strongest work, such as the strikers to the heavy forges, drink water very copiously. In general the men who drink water are really more active, and do more work, and are more healthy than the workmen who drink fermented liquors. I observed on a late journey to Constantinople, that the boatmen or rowers to the caiques, who are, perhaps, the first rowers in the world, drink nothing but water; and they drink that profusely during the hot months of the summer. The boatmen and water-carriers of Constantinople are decidedly, in my opinion, the finest men in Europe as regards their physical development, and they are all water-drinkers; they may take a little sherbet, but in other respects are what we should call in this country tee-totallers.

What is their diet?—Chiefly bread; now and then a cucumber, with cherries, figs, dates, mulberries, or other fruits, which are abundant there; now and then a little fish.

Do they ever use animal food?—Occasionally I believe the flesh of goats; but I never saw them eating any other than the diet I have described.

Did they appear to eat more than the European workman?—About the same; if anything, more moderate as respects the quantity.

Are you aware of the habits of the educated and uneducated workmen, in respect to their habits as regards sobriety out of the works?—There is no doubt that the educated are more sober and less dissipated than the uneducated. During the hours of recreation the younger portion of the educated workmen indulge more in reading and mental pleasures; they attend more at reading-rooms, and avail themselves of the facilities afforded by libraries, by scientific lectures, and Lyceums. The older of the more educated workmen spend their time chiefly with their families, reading and walking out with them. The time of the uneducated classes is spent very different, and chiefly in the grosser sensual indulgencies.

You may be aware that it is a frequent notion that pre-eminently good workmen are always pre-eminent drunkards?—It certainly was so formerly; and to some extent in some branches of occupation and places it may be so still; but a very great

change and a very great improvement is in progress, and has already extensively taken place amongst the mechanics. The number of workmen of that class has very greatly diminished; a higher moral feeling has arisen amongst them than prevailed formerly.

To what circumstances do you attribute that higher moral feeling?—Partly to the better education that has become prevalent within the last fifteen years—partly to a beneficial change in the habits of the people that has been going on progressively.

Then the very clever and the very drunken workmen are becoming less identified?—Much less; and they are less in demand, for the drunken workmen can never be depended on. There has indeed arisen a new and very important class of mechanics in this country within the last fifteen years; namely, those who are required for the construction and management of new works, such as the railroads, the locomotive engines, the engines required in steam navigation, and the machinery for carrying on the manufactures of the country. I think it very desirable that public means should be extended to increase by education the number of this class of mechanics who are at once moral in their conduct, and highly important to the manufacturing prosperity of the country.

Have you yourself, as an employer of labourers, done anything to promote the formation of such classes?—As a manufacturer I may say I have been active in procuring employment and good wages for such mechanics as I have found most fitting from their education for employment; but so far as I could as a private individual, I have promoted institutions for the advancement of education. I have in Manchester given my time as president of a Lyceum, as they are called, for the use of the working classes. This is an institution of a more practical nature than most mechanics' institutions. It furnishes the means of instruction in arithmetic, mathematics, drawing, and mensuration, and by lectures; and furnishes amusement also by reading-rooms, where they may take their coffee, and by museums.

Have you observed instances of the use of such institutions amongst your own workmen?—Yes; amongst the younger men there have been numerous very striking instances of improvement obtained by attendance at the classes of the Lyceum. I may mention also that after consultation with my partners in London, it was my determination to have built a school for the use of the young people at the works at the Isle of Dogs; but finding that the parish officers were in want of land whereon to build a parish-school of an improved description for the parish children, which was to be under the superintendence of the Poor Law Commissioners, I have agreed to give a piece of land for the purpose at a

nominal rent, believing that as I had little time to attend to such a school, it would be much better conducted under such superintendence.

What description of education do you think desirable in such schools with the views you mention?—It would, I think, be desirable to carry further the instruction in arithmetic, and to add some elementary instruction in practical mathematics. They would then be prepared for instruction in the Lyceums, or in well-managed mechanics' institutions.

In respect to the conduct of workmen after their hours of labour, is there any expedient course which, upon experience, you can recommend for their improvement?—The main thing, it appears to me, for their social improvement is to provide for the occupation of their leisure hours; the first of these is to make the home comfortable, and to minister to the household recreation a . amusement: this is a point of view in which the education of the wives of labouring men is really of very great importance, that they may be rational companions for men. In this point of view also, I think it very important that whatever out-door amusements are provided, should not be provided for the men alone, but rather for the men and wives together, and their children.

Do you at the Lyceum make any arrangements for carrying out this principle?—Yes; we make a particular point of it. For example, a few nights ago a tea-party was given, to which the wives and families of the members were admitted, and at which there were various amusements. There was an exhibition of the musical glasses; there was also a piano for some instrumental and some vocal music; there were reading and recitations from favourite authors, and very great entertainment was given at a very cheap rate to 400 or 500 men, women, and children. The opening of public walks, which might be resorted to by the men and families in fine weather, and gardens would, as appears to me, be very valuable additions to these means. It is for such public occasions amongst others that I am for seeing the working-people well dressed, and that I should never care to what extent of finery they carry it, as I believe it all tends to increase their self-respect. It was highly gratifying at the tea-party at the Lyceum to see the extreme neatness and respectability of dress of the working men and their families.

THOMAS ASHTON, Esq., of Hyde, Cheshire.

What number of workmen have you in your employment?—Upwards of 3000.

What differences have you in the course of your experience

observed between the workmen who are educated and those who are uneducated?—I find that those who are best educated see their own interests the most clearly.

In what way has this more clear perception of their own interests as workmen, affected you as a master?—I have the fewest disturbances and manage the most easily with them. Whenever the workmen have been disturbed, and strikes have been threatened, I have called together the most intelligent men in my employment, and I have said to them: "Now, my advice to you is that you will study your own interest and do what you think the best for yourselves; but be careful and *think*—examine and consider what is really for your own interest. I shall be glad that you will really do what is for your own interest, because that which is *really* best for your interest is also the best for mine." After considering for a time they usually find that it is not for their interest to join in strikes, and we have been very little disturbed by them.

How have you found the opinions of this class of workpeople on the subject of large capital?—They appear to be quite aware that it is for their advantage; they find that in connexion with large capital they get the best wages and the most constant work. They have seen the concerns in which small capital is embarked uncertain, irregular in their payment of wages, making frequent reductions, and stopping in periods of pressure, whilst concerns conducted with large capitals are carried on. Indeed, in consequence of some Chartist agitation we had a discussion on this subject with some of our workpeople. I said to them, "Suppose, according to the Chartist proposal, there was a division of property, are you sure that you would be the better for it?" It was shown to them that the share of each would not be enough to manufacture with, and must soon disappear. They were fully aware that it would not do to carry on such business by a company or by co-operation, but that it was impracticable to carry on such concerns otherwise than by one individual, by unity of control, and the constant energy of individual interest. I said to them, "After the Chartists have divided my money amongst you, and have spent it, you will begin to want work; will you not again apply to me as a capitalist for work, and what must be my answer?—that I have no money to go and buy cotton with, consequently there will be an end to your wages as well as to the capital with which work and wages are provided for you." All this the sensible and more intelligent men were quick enough in perceiving.

Is the sobriety, steadiness of conduct, and efficiency of workmen, uniformly a characteristic of the better educated workmen? —There are exceptions amongst the better educated, there are some as drunken and dissipated as the rest; some half-educated

workmen, too, have given annoyance by using such arithmetic as they have got in calculating what their employer can produce goods for, and his profits, and settling according to their own notions what it is "just" that he should pay as wages. As might be expected there are material omissions in such calculations. Such workmen moreover, like many of their betters, have to learn that profits are no more determinable in that way, or by notions of justice independently of demand or supply, than wages are determinable solely by the will of the employer.

Have you as a landlord and capitalist thought it worth while to go to any expense in the education of the workpeople?—Yes, I have; I have provided schooling at my own expense, and I have been at some trouble to find good teachers.

For what number have you provided education at your own expense?—Five hundred.

JAMES SMITH, Esq., Deanston.

What number of workmen have you in your employment at Deanston?—About eleven hundred employed, and including children nearly two thousand supported by it in all.

Are your workpeople for the most part natives, or from what parts do they most come?—The greater number are natives of the neighbouring county, say of Perthshire, Stirlingshire, some from the more northern counties, and a few from Ayrshire; two families from Ireland. Many of the families have been connected with the factory at Deanston, or other factories, all their lives, and the others are from the village and agricultural population around. Some families and many individuals have been employed at Deanston upwards of fifty years.

What is the state of education amongst the workpeople?—Every individual, with few exceptions, has had, or is in the progress of having, a school education.

What are the characteristics of the better educated class as workmen?—The educated in all classes stand the highest as to general intelligence and character, but they are not always the best workmen. [Mr. Smith went on to explain that some workmen manifested great talent and mechanical skill, which qualities were quite distinct from book learning; the book learning did, however, greatly advance the character, and did anything but prejudice the intellect. He, as master, thought it so far important that he provided at his own expense schooling for two hundred children. As a master he thought it right to exercise his influence in preventing drunkenness, &c.; his best workmen were the soberest men; he had three hundred and fifty tee-totalers amongst

them; he had all the workmen residing in habitations which were built with a view to *comfort, cleanliness, warmth, economy, and* respectability of appearance; drainage was particularly attended to. He made it a point also to encourage their rational amusements: at the end of each division of houses there was a white blank for playing tennis: he encouraged quoits and football amongst them. Some of his cotton spinners were tried at football with some picked men from the agricultural parts, whom they beat. Music was also encouraged, and they had amongst them about fifteen or sixteen performers. They had also a library. There was not, with the exception of a small number, any disturbance, and not a strike for the last thirty years; nor had he now a man that lost a day's work from insobriety.]

A. B., another employer of labour who had paid similar attention to the education, the dwellings of workpeople, and their amusements, who employed about eight hundred, and at his own expense provided schooling for upwards of two hundred, stated in private conversation that at first the expenditure in schooling was chiefly given from a desire to make the workpeople happy, but, said he, we have found that, had it all been done simply as an investment of capital, it would have been a highly profitable one. "I would not as a pecuniary speculation consent to take less than 7000*l.* for my set of workmen, upwards of eight hundred, in exchange for the uneducated and uncultivated workmen of another manufacturer opposite. We find the steadiness of the men induces steadiness of work, and comparative certainty in the quantity and quality of the produce." Speaking of the recreations which he had provided for the workpeople, he said, "Thou mayest think it strange for one of my persuasion," (he is one of the Society of Friends,) "but it is true, I have paid for a big drum and some horns, to give them mirth after their hours of labour."

In this manufactory the cotton spinners who hired children as piecers highly preferred and competed for the children educated at the infant schools; when asked the reason, one of them replied, "Because they learn better and require less beating."

II.

REPORT ON THE TRAINING OF PAUPER CHILDREN, AND ON DISTRICT SCHOOLS.

By JAMES PHILLIPS KAY, Esq., M.D., Assistant Poor Law Commissioner, and Secretary to the Committee of Council on Education.

GENTLEMEN, *Norwich*, 1838.

THE pauper children maintained in Union workhouses are dependent, not as a consequence of their errors, but of their misfortunes. They have not necessarily contracted any of the taint of pauperism. They are orphans, or deserted children, or illegitimate, or children of idiots, or of cripples, or felons, or they are resident in the workhouse with their parents, who seek a brief refuge there.

The dependence of certain of these classes of children cannot be transient. The care of their natural guardians is at an end, or is suspended for so considerable a period, that the children have claims on the Board of Guardians, not for food and clothing merely, but for that moral sustenance which may enable them, at the earliest period, to attain independence.

The physical condition of the children who are deprived of the care of natural guardians ought not to be elevated above that of the household of the self-supported labourer. Their clothes, food, and lodging should not be better than that which the labourer can provide for his child. But whenever the community encounter the responsibility of providing for the education of children who have no natural guardians, it is impossible to adopt as a standard for the training of such children the average amount of care and skill now bestowed on the moral and religious culture of the children of the labouring classes generally, or to decide that their secular instruction shall be confined within limits confessedly so meagre and inadequate. The privation of such agencies cannot be proposed as a means of preventing undue reliance on the provision created by the law; but, on the contrary, education is to be regarded as one of the most important means of eradicating the germs of pauperism from the rising generation, and of securing in the minds and in the morals of the people the best protection for the institutions of society.

The duty of providing a suitable training for pauper children

is simple and positive, and is not to be evaded on the plea of the deficiency of such instruction among the self-supported classes, though the nature of the duty of society towards the dependent class may serve to illustrate its responsibilities towards every other class.

It is important to acknowledge how far ignorance is the source of pauperism, and to show how important an agent for the removal of pauperism is a careful training in religion and industry. Of the ignorance which prevails among the pauperised classes the proofs are abundant.

On the 12th of June, 1837, there were 1,050 adult paupers in the 12 East Kent Union workhouses, of these only four could read and write well; 297 could both read and write either decently or imperfectly, and 474 could neither read nor write.

Of 1,675 adults in the workhouses of 22 Unions and 5 Incorporations in Suffolk and Norfolk at the same date, 10 could read and write well, 281 could both read and write, either decently or imperfectly, and 928 could neither read nor write.

The ignorance prevalent among the children trained in workhouses, notwithstanding the efforts recently made to improve the schools, is exhibited in the following table of the children, between the ages of 2 and 16, maintained in the workhouses of Suffolk and Norfolk, in the week ending the 9th December, 1837. Every week will, I trust, remove a portion of this reproach, so that it may soon cease to exist:—

No. of youths from 9 to 16.	Who can read well	206
	Who can read imperfectly	217
	Who cannot read	62
	Who can write well	122
	Who can write imperfectly	138
	Who cannot write	211
No. of boys from 2 to 9.	Who can read well	70
	Who can read imperfectly	149
	Who cannot read	267
	Who can write well	6
	Who can write imperfectly	56
	Who cannot write	398
No. of girls from 9 to 16.	Who can read well	173
	Who can read imperfectly	207
	Who cannot read	38
	Who can write well	47
	Who can write imperfectly	97
	Who cannot write	262
No. of girls from 2 to 9.	Who can read well	30
	Who can read imperfectly	186
	Who cannot read	225
	Who can write well	1
	Who can write imperfectly	33
	Who cannot write	407

It must be confessed, and with the deepest regret, that the inquiries of the Statistical Society of Manchester respecting the education of the poorer classes in the boroughs of Manchester, Salford, Liverpool, Bury, Bolton, and York, and in the towns of Ashton, Stayley Bridge, and Dukinfield, and the results of similar investigations of the Statistical Society of London, in the borough of Westminster, of the Statistical Society of Bristol, in that city, and of the committee of the Marylebone vestry, in their parish, together with the inquiries of Mr. Leonard Horner, the Inspector of Factories, afford but slender opportunities for contrast between the state of instruction among the self-supported and dependent classes in this country. But this observation ought to be coupled with the fact, that England is the most pauperised country in Europe, and that in which the Government has effected little or nothing for the education of the poorer classes, while every other Protestant kingdom has, during the present century, employed its best resources wisely and vigorously for the elementary education of the people.

The dependence of the majority of the pauper children is unavoidable and absolute. The burthen of their dependence cannot cease, even temporarily, unless the children be reared in industry. The consequences of a neglect of training in the old workhouses may be ascertained by such inquiries as were conducted by Mr. Hickson in the gaols, at the request of the Poor Law Commissioners, where he found that crime had recruited its ranks, to a large extent, from the workhouses under former management. Whether the state acknowledge its interest in the education of the masses or not, the consequences of a neglect of the pauper class evidently are prolonged dependence and subsequent chargeability, as criminals in the prisons and penal colonies.

The state is *in loco parentis* to the pauper children, who have no natural guardians, and the interest it has in the right discharge of its responsibilities may be illustrated by supposing the Government had determined to require direct, instead of indirect, service in return for education. If the army and navy were recruited by the workhouse children, it is evident that it would be the interest of the state to rear a race of hardy and intelligent men—instructed in the duties of their station—taught to fear God and to honour the Queen. The state has not less interest, though it may be less apparent, in supplying the merchant service with sailors, and the farms and the manufactories of the country with workmen, and the households of the upper and middle classes with domestic servants: it has the most positive and direct interest in adopting measures to prevent the rearing of a race of prostitutes and felons.

It may be questionable how far it would be proper to permit

the pauper children to volunteer for service in the army and navy, and to train them accordingly; but the duty of rearing these children in religion and industry, and of imparting to them such an amount of secular knowledge as may fit them to discharge the duties of their station, cannot be doubted.

The workhouses of 35 Unions in Norfolk and Suffolk are now completed, and are in full operation. These Unions contain 537,027 inhabitants, or about one twenty-sixth part of the population of England and Wales. In the week ending 9th December, 1837, the workhouses of these Unions contained—

Youths from 9 to 16	483
Girls from 9 to 16	420
Boys from 2 to 9	547
Girls from 2 to 9	456
	1,906

or 1906 children, from 2 to 16, were in that week maintained and educated in 35 Union workhouses now in operation in Norfolk and Suffolk.

The questions presented for the consideration of the Poor Law Commissioners are—

1. What number of children maintained in the Union workhouses will remain there during periods which will render them chiefly, if not solely, dependent on Boards of Guardians for education.

2. How far would the absence of a well-devised system of education for these classes of children tend to increase the extent of hereditary pauperism, and what would be the consequent pecuniary burden.

3. What means can legitimately be adopted to train these children in such a way as to render their future dependence on the rate-payers improbable.

The children of able-bodied labourers are resident for short periods only in the Union workhouses, and their temporary dependence on the care of the Boards of Guardians does not entail upon those bodies so serious a responsibility as arises when a child has no natural guardians, or when its natural guardians are prevented from performing their duties by physical and legal disabilities.

In such cases the child is dependent on the Board of Guardians for more than maintenance: it must be trained in industry, in correct moral habits, and in religion; and must be fitted to discharge the duties of its station in life.

Perceiving that a very large proportion of the children maintained in workhouses were not protected by natural guardians, or could not receive effectual protection from them, I was anxious

to ascertain their exact number, and for this purpose I issued a circular to the masters of workhouses throughout Norfolk and Suffolk, in which I inquired, 1st, What number of bastards, orphans, children deserted by their father, children deserted by their father and mother, children of men undergoing punishment for crime, children of persons dependent on parochial aid on account of mental or bodily infirmity, were resident in each workhouse. These children will evidently owe the greater part, if not the whole, of their training in industry and religion to the care of the Boards of Guardians, on account of the loss of their parents, or their inability to perform their natural duties. I also inquired, 2ndly, What number of children of able-bodied widows, of able-bodied widowers, and what number of children belonging to large families of able-bodied labourers, admitted into the workhouse for the relief of their parents, were resident in the workhouses. These latter classes are likely to remain in the workhouses longer than a third class, viz., the children of able-bodied parents who seek a temporary asylum there with their families, but whose dependence is generally transient. In the two former groups of classes the children will be mainly, if not entirely, dependent for their training on the Guardians, or they will remain so long dependent as to render their education a subject of great importance, when considered only in relation to its probable effects on the amount of pauperism, which has formerly been directly reproduced from such sources, and which would probably be perpetuated without such care.

The results of my inquiries in Norfolk and Suffolk are contained in the following table, which states the number of children, from 2 to 16, resident in the Union workhouses in the week ending 9th December, in each of the classes likely to be dependent on the Boards of Guardians, until they are fitted by their education to earn their own livelihood. Besides the children enumerated in this table, the workhouses contained in the same week 59 children of able-bodied parents, who were also resident in the workhouses, and 259 infants too young for instruction:—

Bastards	543
Orphans	382
Children deserted by father	279
Children deserted by father and mother	54
Children of men undergoing punishment for crime	171
Children of persons dependent on parochial aid on account of mental or bodily infirmity	116
Children of able-bodied widows, resident in the Union workhouse	144
Children of able-bodied widowers resident in the Union workhouse	36
Children belonging to large families of able-bodied labourers, admitted into the workhouse as relief to their parents	122
	1,847

It is difficult to perceive how the dependence of the orphan, illegitimate, and deserted children, and the children of idiots, helpless cripples, and of widows relieved in the Union workhouses could cease, if no exertion were made to prepare them to earn their livelihood by skilful labour, and to fit them to discharge their social duties by training them in correct moral habits, and giving them knowledge suited to their station in life.

It may be important to consider what is the usual training of an agricultural labourer's child under his father's roof, and in what respects it may be proper to imitate that training in educating those children who are necessarily maintained in workhouses.

The child of a labourer reared beneath its parent's roof is trained to labour. At a very early period the lad follows his father a-field—he rides the horse home or to water—he is employed to scare the crows from the recently sown corn. By and by he assists his father when threshing in the barn—he drives the plough team. At hay-time the whole family, both boys and girls, find constant work; at harvest they are very early employed in gleaning; at seed-time they work, at a very tender age, at wheat dropping.

The boys gradually become thus initiated in the duties of husbandry, until by assisting more or less in ploughing, harrowing, threshing, milking, and the charge of horses, they take their station in some department of husbandry; commonly first as team-men; and afterwards are gradually employed in those departments of labour requiring greater skill, and implying more confidence in their integrity and industry.

This is the industrial training of a labourer's boy, when resident under his father's roof.

The girls do much work a-field. I have already alluded to their services in the corn and hay-harvest, and at wheat-setting. They are also employed in carrying their father's provisions to the field—in stone gathering—in hoeing—in turnip topping, and other agricultural work, which is not deemed too laborious to be performed by a female in the rural districts. In the labourer's own household (the more appropriate scene of female exertion and care) the girls learn to scour the floors, to wash the linen, to sew and knit, and to clean the few utensils which their father may possess; to assist their mother in baking or in cooking their frugal meal, or in nursing a younger child. The girls thus acquire a knowledge of domestic management, and become fitted (too frequently, it is to be feared, not so fully as could be wished) to perform the domestic duties, and to encounter the domestic cares of a labourer's household.

Little can be said respecting the training which the children of labourers receive in useful learning suited to their station in

life, because few schools exist in the rural districts, and the instruction in many of those which do exist is extremely meagre.

Neither can it be said that the religious instruction of the labourer's family is always satisfactorily promoted by the existence of customs, such as prevail in the households of the Scottish peasantry; but the domestic and social sympathies are awakened and cherished by mingling with their father's family, and associating with their neighbours.

But if an orphan, illegitimate, or deserted child, or the child of an idiot, helpless cripple, or felon, or of a widow, be maintained in the Union workhouse from the age of three to the age of fourteen, (the age when he ought to go to work,) one of two results must ensue:—

1. Either the child must at that period have acquired such habits of industry, such skill in some useful art, and such correct moral habits, as to render his services desirable; in which case he will go to service, and his dependence will cease.

Or, 2dly, by neglect, or by the adoption of a system of training not calculated to prepare them for the discharge of the practical duties of their station in life, the pauper children maintained in workhouses are not *qualified for service*, and then it becomes necessary to adopt the old expedient for the removal of the burthen created by the absence of a correct system of moral and industrial training, viz., *to apprentice the children* to a trade or calling, by paying a premium to some artisan to instruct them in an art by which they may earn their subsistence.

The payment of premiums for apprenticeship* has been shown to be a system having many most pernicious tendencies, and which has altogether failed to promote the well-being of the children, for whose benefit this expedient was adopted. That it should have proved inefficacious cannot be a legitimate subject of surprise, when, apart from all the other sources of failure, it is borne in mind, that a child apprenticed from a workhouse under the former system, had been brought up in listless idleness, or useless and inappropriate work, to which it was subjected as a task; and that it was in constant association with all the vicious adult males and females congregated within the workhouse of the Incorporation or Parish—without any means being used to teach it how to earn its livelihood, or to rear it in the habit of performing its duties.

It will be deemed a moderate computation if I suppose that out of the 1,847 children more permanently supported in the workhouses of Norfolk and Suffolk, 180 would have to be annually apprenticed, if the children were not prepared for the dis-

* Vide account of compulsory apprenticeship in Norfolk and Suffolk, p. 77.

charge of their duties in after life by careful training. In the Samford Hundred alone, containing only 11,000 inhabitants, 33 children were apprenticed annually for a series of 16 years, at an average premium of about £10 each.* If, therefore, 180 children were apprenticed from the present workhouses of Norfolk and Suffolk every year, 4,356, or, in round numbers, 4,300 children will have to be apprenticed annually in England and Wales, at an expense of £43,000 per annum, provided means cannot be adopted for training the children educated in workhouses in such a manner as to avoid any necessity for having recourse to the system of giving premiums with apprentices in future. This expense could only be regarded as the final expense attending a neglect of the industrial and moral training of the children, upon the assumption that the future dependence of these children would be *averted* by their apprenticeship, a consequence which is contrary to all previously ascertained facts. Even if this preliminary expense were incurred, and the apprenticeship of the children were conducted with much greater care and skill than it formerly was, under the management of parishes or incorporations, a large number of the children whose training had been neglected up to the period of their apprenticeship would be found so ignorant, idle, and vicious, that the efforts of the best master would be vainly exerted for their reformation, and they would sooner or later become a disgrace and burden to the country, either in its gaols or in its workhouses.

It is found in the schools of the Children's Friend Society at Hackney Wick and Chiswick, that the reformation of the vagabond children trained there is extremely difficult, if not impossible, when they are admitted after the age of 12. The success of the apprentice's master would probably be less when he received a child from a workhouse, where no care had been taken to form habits of industry and good conduct, and where the instruction of the children in knowledge suited to their station in life, and in religion, had been neglected.

The number of children maintained and educated in the workhouses of Norfolk and Suffolk is considerably less than in some other parts of England. Thus I am aware that the workhouse schools in the county of Kent contain a much greater number of children in proportion to the population; whereas probably in the North of England a smaller number of children might be found to be dependent on the rate-payers.

Though the workhouses have only recently received certain classes of children, and many workhouses have been brought into operation at a very recent period, the table in p. 28 shows that the dependence of a considerable number of the children cannot be regarded as transient:—

* See Return p. 27.

SUFFOLK :—SAMFORD HUNDRED—TATTINGSTONE HOUSE.

RETURN of the number of CHILDREN ADMITTED, also the number who have been DISCHARGED, APPRENTICED, PLACED IN SERVICE, or have DIED, in each Year, during Seven Years, ending the 25th March, 1837.

Classes.	1830-1831.					1831-1832.					1832-1833.					1833-1834.					1834-1835.					1835-1836.					1836-1837.				
	Admitted.	Discharged.	Apprenticed.	Placed in service.	Died.	Admitted.	Discharged.	Apprenticed.	Placed in service.	Died.	Admitted.	Discharged.	Apprenticed.	Placed in service.	Died.	Admitted.	Discharged.	Apprenticed.	Placed in service.	Died.	Admitted.	Discharged.	Apprenticed.	Placed in service.	Died.	Admitted.	Discharged.	Apprenticed.	Placed in service.	Died.	Admitted. *	Discharged.	Apprenticed.	Placed in service.	Died.
1. Children of able-bodied men in employment	33	21	21	3	..	50	33	13	4	..	33	39	17	1	..	24	4	13	3	2	39	20	11	2	..	38	24	14	5	2	54	42	12	7	1
2. Children of able-bodied widows	4	2	7	1	..	9	2	5	..	1	1	..	3	..	..	6	2	2	..	2	12	4	3	..	..	4	11	1	..	..	7	2	..	2	..
3. Children whose parents were disabled	12	4	1	..	1	10	6	1	..	1	6	1	1	..	..	6	4	2	1	1	12	8	1	..	..	15	1	2	..	..	8	9	1	2	1
4. Orphans	6	..	4	..	..	4	4	5	..	..	11	1	5	..	..	3	1	3	1	..	8	2	..	4	1	2	4	3	1	1	5	..	5	4	..
5. Deserted children	3	1	..	..	..	3	..	2	2	..	..	..	1	..	..	..	..	1	..	..	1	..	..	1	..	1	3	..	2	..	6	..	..	..	..
6. Children of convicts	2	..	2	..	..	2	..	2	..	..	7	..	3	..	..	4	..	1	1	..	3	1	1	..	..	2	..	4	3	..	2	1	2	1	1
7. Children of lunatics and idiots	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Tattingstone Workhouse, 22nd January, 1838

WILLIAM CATCHPOLE, *Clerk.*

TABLE showing the period during which CHILDREN have resided in WORKHOUSES in NORFOLK and SUFFOLK, in answer to a circular issued 3d January, 1838.

Number of children of both sexes, between the ages of 2 and 16, who have been in the workhouses less than a fortnight	193
Number more than a fortnight and less than a month	223
Number more than 1 month and less than 3	548
Number more than 3 months and less than 6	307
Number more than 6 months and less than 1 year	275
Number more than 1 year	474

Children are received into the infant school of the Glasgow Normal Seminary from the age of two to that of six. If, therefore, means were provided for the adoption of a correct classification, the whole of the 1,847 children maintained for considerable periods in the workhouses of Norfolk and Suffolk are of an age to be trained according to the system pursued in the Glasgow Normal Seminary. The reader will bear in mind* that these workhouses contain 59 children and 259 infants, besides those 1,847 children between the ages of two and sixteen.

If the children maintained in the workhouses of the rest of England be admitted to bear the same proportion to the population as in Norfolk and Suffolk, the workhouses of England would contain 46,125† children between the ages of two and sixteen, and 44,697 children between the ages of two and sixteen who are longer resident in the workhouses.

If the want of classification and the absence of correct discipline which prevailed in the old workhouses continued in the new, a great number of these latter children would acquire the habits of hereditary paupers, or even of felons; and (which would by no means be improbable) if *one-tenth of them only became dependent during six months of each year,* with families of the ordinary size, they would occasion a burthen of £104,574. 12*s.* per annum.

It is certainly impossible to exhibit the consequences of such neglect by direct statistical calculations, and a moralist would probably deprecate the adoption of such a method of appreciating the effects of this mismanagement, or, if he admitted it, would urge that a mass of hereditary paupers could not fail to prove a demoralizing leaven which would corrupt society, and, by its vicious influence, vastly increase the charge which the public

* See p. 23.

† A return subsequently required by the Poor Law Commissioners (see Report on the Continuance of the Commission) shows that at Midsummer, 1838, the workhouses of 478 Unions contained 42,767 children under 16 years of age; and it is estimated from the returns from Essex and Cambridgeshire, that 38,000 of these were between 2 and 16 years of age. It is therefore evident that, in the 600 Unions into which England and Wales are to be divided (if the ratio apply to the remainder), 47,000 children, between the ages of 2 and 16, will have to be trained.

would sustain in relieving the indigence of an enervated, vicious, or turbulent race, and in protecting society from their assaults.

The Commissioners will not be insensible to any consideration which could influence the mind of a moralist in estimating the effects of different systems of training on the probable future destiny of 45,000 children; but such considerations are so inseparably connected with that single object which the Commissioners can legitimately propose to accomplish, viz., the cessation of the dependence of these children on the rate-payers at the earliest period, that means must necessarily be employed which would satisfy the moralist that all he can desire will be attained when these objects are fulfilled. I, therefore, proceed to inquire what means can legitimately be adopted to train these children in such a way as to render their future dependence on the rate-payers improbable.

In discussing this question it will be more convenient to consider,—

1. Whether the general arrangements for the maintenance of children in workhouses could be improved, before deciding;

2. What methods should be adopted respecting—

A. The industrial training of the children,
B. The methods of instruction and moral discipline,
C. The extent of secular instruction, and
D. Religious instruction.

When these subjects have been considered in relation to a proposed improvement in the general management,—

3. The applicability of these principles to existing arrangements in Union workhouses will be determined.

The establishment of two County or District schools of industry in each of the counties of Norfolk and Suffolk appears to be rendered desirable by various important considerations:—

1. The number of orphans and other children of the first class maintained in each Union workhouse throughout these counties is not sufficient to afford an opportunity for correct classification, so as to conduct the general and industrial instruction of the children on such a system and by such methods in each workhouse school as to procure the largest amount of benefit from a careful training of the children. The children of able-bodied labourers, for the most part, are received into the workhouses with their parents, who seek only a temporary refuge there, and their period of residence is so short that the children rather disturb the routine of school arrangements adopted in the workhouses than, by their numbers, increase the efficiency of the system adopted.

The industrial training of the children who have no natural guardians, and who are, therefore, altogether dependent on the

Board of Guardians for instruction in the practical duties of life, is thus impaired by two circumstances, which would cease to exist provided such children were sent to a District school.

The classification of the children separately from the adults (excepting their parents) is preserved with care in the workhouses of Norfolk and Suffolk, but cannot be rendered perfect in any workhouse as at present regulated. The adult paupers maintained in workhouses are generally persons of confirmed pauper habits, from association with whom the children could acquire nothing but evil. The females are generally persons whose characters unfit them for service; and the men are objects of fear or suspicion to the occupiers, or persons whose indolence or want of skill renders their labour valueless. The children must come more or less into contact with these persons, and all association with them contaminates. Moreover, the training of a child should not be procured by coercion and restraint, but rather by inspiring him with a love of industry and knowledge, and it would doubtless be an advantage, that whatever pleasant associations the child might connect with the care bestowed on his early years should attach to the *District school*, and not to the *workhouse*.

A child should not be degraded in his own estimation by being a member of a despised class. A child cannot be a pauper in the sense in which that term is commonly understood; that is, he cannot be indigent as the consequence of his own want of industry, skill, frugality, or forethought, and he ought not, therefore, to be taught to despise himself. The pauper apprentice and the juvenile vagrant were, under the old system, brethren of the same class—outcasts; neither trained by frugal and industrious parents, nor by a well-devised system of public industrial instruction.

The dependence of the pauper children is probably the natural consequence of the crimes or follies (but it may also be of the misfortunes) of their parents; and in any of these cases it is the interest of society that the children should neither inherit the infamy, nor the vice, nor the misfortunes of their parents.

This stigma, and consequent loss of self-steem, would be entirely removed if the children were taught at a District school, with other children, not received from the workhouses, nor the offspring of pauper parents.

When the whole arrangements for the Unions of Norfolk and Suffolk are completed, those counties will contain 39 Unions or Incorporations, for the workhouses of which it will be necessary to provide efficient schoolmasters and schoolmistresses. I find it impossible to secure the services of schoolmasters from Scotland at a lower sum than £40 per annum, with a separate apartment and maintenance in the workhouse. The salary for a good schoolmistress ought to be £30 per annum, with a separate apartment and maintenance. Several Unions have consented to give

£40 per annum to their schoolmaster, and £25 per annum to their schoolmistress, with separate apartments and maintenance. One or two Unions have agreed to higher salaries. Where the salaries are lower, the schoolmasters and schoolmistresses have never received any regular instruction in a correct system of training children; and, though exertions have been made to improve their methods by sending them to better schools for short periods, or by sending well-trained teachers to their schools, these teachers are still very imperfectly acquainted with their duties.

The salaries offered in the various Unions for the services of schoolmasters and schoolmistresses are often not sufficient to secure efficient instructors; and persons trained in the model schools in the metropolis and in Scotland have some aversion to a residence in a workhouse.

A combination of Unions for the support of a common school, for the instruction of the children who have lost their natural guardians, would enable the Boards to provide the most efficient schoolmasters and schoolmistresses, and, at the same time, to reduce their annual expenditure. (See Calculations.) The objections entertained by duly qualified teachers to a residence in the workhouse would not exist with respect to a Central school separate from all the workhouses.

In 39 workhouses the cost of this arrangement may be thus estimated:—

Lowest Salaries at which the efficiency of the Schools of 39 Workhouses could be maintained.

	£.	s.	d.
Schoolmasters, £35 per annum each	1,365	0	0
Schoolmistresses, £20 per annum each . . .	780	0	0
Maintenance of schoolmasters, at 8s. per week £20. 16s. per annum	811	4	0
Maintenance of schoolmistress, ditto, ditto . .	811	4	0
	£3,767	8	0

Besides this outlay, a pauper shoemaker and tailor, employed in assisting the schoolmaster, are generally maintained in each workhouse, at an outlay of 3*s*. or 4*s*. per week each, or £7. 16*s*. per annum each, which, in 39 workhouses, would amount to an outlay of £608. 8*s*., or £811. 4*s*. But the persons employed in these capacities ought to be respectable and skilful workmen, and the services of such workmen could not be obtained for less than 10*s*. per week for wages, and 5*s*. per week for maintenance, or £3,120 per annum; making a total outlay for the efficiency of the present system, as respects the officers alone, of £6,887. 8*s*. per annum.

In each of these 39 Unions at least £80 must also be expended in Bibles, Testaments, Prayer-books, Catechisms, Lesson-books,

apparatus in gardening, and carpenters' tools, shoemakers' and tailors' implements, &c.; and a separate washhouse and laundry for the girls must be built and fitted up at an expense of at least £150 or £200 in each workhouse, or of from £5,800 to £7,800. This added to the outlay of £3,120 in books, tools, &c., and to an expense of £20 in each Union for fitting up the apartments of the schoolmaster and schoolmistress, would occasion a total outlay of from £9,800 to £11,800 on these preparatory arrangements. Many considerable advantages as respects discipline would be secured by assembling the children, now more permanently maintained in the 39 workhouses, in four District schools, which should each contain 400 or 500 children.

These four schools might be provided with the most efficient schoolmasters and schoolmistresses, &c., for the following annual outlay for salaries, and abundant maintenance:—

Four Schools, containing 400 or 500 Children each.

Four principal schoolmasters, Four principal schoolmistresses,	salaries £100	£400
Maintenance, 10*s*. per week each		208
Four assistant schoolmasters, Four assistant schoolmistresses,	salaries £60	240
Maintenance, 10*s*. per week each		208
Four tailors' wages, 10*s*. per week, Maintenance, 5*s*. ditto		156
Four shoemakers' ditto, ditto		156
Four laundresses' wages, £15 per annum		60
Maintenance, 5*s*. per week		52
		£1480
Four chaplains, £150 per annum		600
		£2080

A clear saving of £4,800 per annum in the salaries and maintenance of officers would be thus accomplished in 39 Unions, and the Boards of Guardians would be enabled to obtain efficient schoolmasters and schoolmistresses, by affording sufficient salaries and more liberal maintenance and accommodation.

If the boards decided to add to the preceding staff the services of six Pupil Teachers in each District school, at an expense of £30 per annum for the clothing, maintenance, and wages of each pupil teacher, and to employ a Drill master in each District school at a cost of £50 per annum for salary and board, an additional annual outlay of £920 would be incurred, which would still leave a clear annual saving in the salaries and maintenance of officers of £3,880.

If such Unions as, upon a careful estimate, are likely to supply to a District school 400 children of the classes who have lost the guardianship of their parents, were united for the purpose of

maintaining such an establishment, it ought to be so conducted as to insure the cessation of the dependence of the children trained there at the earliest period.

Having been impressed with the importance of considering the principles on which such an establishment should be conducted, the Commissioners are aware that my colleague, Mr. Tufnell, and myself visited Scotland for the purpose of inspecting the Sessional School, conducted by Mr. Wood, in Edinburgh, and the model schools of the Glasgow Normal Seminary. The Commissioners are also aware that we have visited various industrial schools in quest of similar information, particularly the schools of the Children's Friend Society at Hackney Wick, and at the Victoria Asylum, Chiswick, and Lady Noel Byron's school at Ealing, &c., &c. More recently I have had an opportunity of inspecting the principal schools of Holland and Belgium, France and Switzerland and the Rhine.

The attention which my duties have required me to give to the improvement of the methods of instruction pursued in the schools of Union workhouses, and the necessity of placing clearly before myself the principles on which the schools should be regulated, induced me to prepare a slight sketch of a school, which I submit to the Commissioners as the result of inquiries and observations respecting plans pursued in the schools previously alluded to, but into which I have carefully avoided the introduction of any plan which has not been thus tested by experience.

The object which can be most legitimately proposed as a ground for the interference of the Poor Law Commissioners in the training of children maintained and educated in the workhouses is the effect which such training must have in the formation of habits of industry, and thus enabling them in after-life to support themselves by the labour of their hands.

I therefore propose to consider in the first place what methods should be adopted for the *industrial training* of the children.

The great object to be kept in view in regulating any school for the instruction of the children of the labouring class is the rearing of hardy and intelligent working men, whose character and habits may afford the largest amount of security to the property and order of the community. Not only has the training of the children of labourers hitherto been defective, both in the methods of instruction pursued and because it has been confined within the most meagre limits, but because it has failed to inculcate the great practical lesson (for those whose sole dependence for their living is on the labour of their hands) by early habituating them to patient and skilful industry.

An orphan or deserted child, educated from infancy to the age of 12 or 14 in a workhouse, if taught reading, writing, or arithmetic only, is generally unfitted for earning his livelihood by

labour. Under such a system he would never have been set to work. He would, therefore, have acquired no skill; he would be effeminate; and, what is worse, the practical lesson in industry, which he would have acquired had he been so fortunate as to live beneath the roof of a frugal and industrious father, would be wanting.

In mingling various kinds of industrial instruction with the plan of training pursued in the model school, it is not proposed to prepare the children for some particular trade or art, so as to supersede the necessity for further instruction; it is chiefly intended that the practical lesson, that they are destined to earn their livelihood by the sweat of their brows, shall be inculcated; to teach them the use of various tools, so that they may be enabled to increase the comfort of their own households by the skill which they have acquired, or to obtain a greater reward for their labour by superior usefulness.

The district school should be surrounded by a garden of six, eight, or ten acres, in which the system of instruction in gardening adopted in Lady Byron's school at Ealing, in conformity with the plans pursued in De Fellenburg's establishment at Hofwyl, in several of the Orphan-houses and Normal schools of the Protestant cantons of Switzerland, in the school of the Children's Friend Society at Hackney Wick, and also by Mr. William Allen, and others, ought to be pursued. The schoolmaster should, at the appointed hours, accompany the boys into the garden, and superintend their instruction in digging, hoeing, planting, and careful gardening. They will thus be initiated in employment closely resembling rural labour, which, if it were only followed by the useful result of enabling them in after-life to cultivate their cottage allotment with greater skill, would be a desirable acquisition. The schoolmaster should be provided with some simple elementary works on gardening, husbandry, seamanship, and handicraft trades, from which some of the oldest boys should read extracts daily to the school; after which the master should ask such questions and make such comments as he may deem desirable, to awaken and sustain the attention of the children.

The following is an account of the system of industrial instruction pursued in the garden of the Ealing Grove school, from the pen of the lamented Mr. Duppa :—

" Gardens of the sixteenth of an acre were measured out and let to the elder boys at three pence per month; seeds they either bought of their master, or procured from their friends. Racks for the tools were put up and numbered, so that each boy had a place for his own, and in that he was required to keep them.

" The objects of this school are to educate children destined for country pursuits, in a manner to make them better workmen, and more intelligent and happier men than is at present the case.

For this purpose it was conceived necessary that they should early acquire the habits of patient industry; that they should be acquainted with the value of labour, and know the connexion between it and property; that they should have intelligence, skill, and an acquaintance with the objects by which they are surrounded; that the higher sentiments, the social and moral part of their being, should obtain a full development. The habit of patient industry is endeavoured to be given to them by requiring that they should labour for a portion of the day, viz., three hours; and this, partly for the institution, partly for themselves, in their own gardens. During the period in which they work for the institution they are paid according to the labour they are able to perform; the monitor who watches over them reporting the industry of each to their master, who remunerates them accordingly. In their gardens they are allowed to labour for an hour and a half each day; and, as they pay a rent for the land and purchase the seeds, they become anxious to spend that time most actively in bringing their gardens into as forward a state as they can. On account of the rough state of the ground, and the novel duties of the schoolmasters, there was, in the first instance, a gardener hired, who directed them in the cultivation of their gardens, and instructed them how to obtain a rotation of crops, in order that the ground should never remain unoccupied, but his services have now been for some time discontinued. So industriously have the boys laboured, and so well have they succeeded, that their gardens, with few exceptions, presented before the crops were harvested an appearance of neatness and good husbandry. They have all since either disposed of their vegetables, or taken them home to their families. But vegetables were not the only crop; around the border of each, flowers were cultivated. It is a great matter to induce a taste for, and to give a knowledge of, the manner of cultivating flowers. They are luxuries within the power of every person to command.

"There is a considerable gaiety and alacrity in all this; the boys learn to sing many cheerful and merry songs; they strike up a tune as they go out in bands to work, and as they return they do the same. Their tools are taken down from their appropriate places, and are duly returned to them, so that whenever the school may be visited, it will be found that there is a place for everything, and that everything is in its place. But this is not for the sake of gratifying the eye of the visitor. Of all habits that give value to industry and exertion, that promote comfort and favour virtue, there is not one more efficacious than this. It is, too, a habit in which the labouring classes are peculiarly deficient; the cultivation of it is considered in this school a point of great moment. Nor is it confined to the arrangement of the tools; prudence and foresight are closely connected with the accurate keep-

ing of accounts. Accordingly each boy has a little book of receipt and expenditure. The profits of his garden, the earnings of his labour, &c., are entered on one side; the payment of rent, the purchase of seeds, &c., on the other. An extract from the children's books will best show their character. When sufficient time has elapsed there is but little doubt not only that the gardens will become more profitable, but other branches of industry will be so organized as to bring in a return of some importance. We do not make this assertion at hazard, as last year one of the boys cleared £1. 18*s*. 10*d*. from his sixteenth of an acre of land, after paying the rent, seeds, manure, &c.

"George Kirby, aged 14 years.

Cash.

1836.	Received.	Particulars of Receipt and Expenditure.	Paid.
	£. s. d.		£. s. d.
4th March .	. .	Onion seed	0 0 2
1st April . .	. .	1 month's rent	0 0 1½
4th „ . .	. .	1 quart of peas	0 0 3
1st May . .	. .	1 month's rent	0 0 1½
1st „ . .	0 0 2¾	For work.	
6th „ . .	. .	1 bushel of potatoes . .	0 2 0
10th „ . .	. .	Lettuce seed	0 0 2
24th „ . .	. .	Scarlet beans	0 0 4
30th „ . .	. .	French ditto	0 0 2
1st June . .	. .	1 month's rent	0 0 1½
14th „ . .	. .	Cabbage plants	0 0 1½
16th „ . .	0 0 7½	Lettuce plants.	
23d „ . .	0 0 10	For labour.	
1st July . .	. .	1 month's rent	0 0 1½
14th „ . .	0 1 4	2 pecks of peas.	
16th „ . .	0 0 1	Onions.	
18th „ . .	0 0 2½	Scarlet runners.	
24th „ . .	0 0 9	Do. do.	
30th „ . .	0 0 4	Do. do.	
1st August .	. .	1 month's rent	0 0 1½
4th „ .	0 0 9	Scarlet runners.	
7th „ .	0 0 8	Potatoes.	
9th „ .	0 1 1	Scarlet runners.	
11th „ .	0 0 8	Potatoes.	
16th „ .	0 0 4	Scarlet runners.	
27th „ .	0 0 2	Do. do.	
1st Sept. . .	. .	1 month's rent	0 0 1½
13th „ . .	0 0 6	Scarlet runners.	
17th „ . .	0 0 2	Do. do.	
1st October .	. .	1 month's rent	0 0 1½
15th „ .	0 1 10	For labour to September 30th	
19th „ .	0 8 6	Potatoes.	
26th „ .	0 6 0	Do.	
	1 5 0¾		£0 4 1
	0 4 1		
	£1 0 11¾		

"Thus far has a sound foundation been laid; habits of industry and cheerfulness while at labour—habits of order and arrangement in the management of expenditure. And did the education cease here, these are not all the advantages which would be derived from it. The gardens are all exposed, all know the value of produce. It has been asked by persons who have visited the school, 'Do not the children rob one another? Is their little produce safe?' It is safe; they do not rob one another. The rightful acquisition of property begets a knowledge of the principles upon which right is grounded. It is clear to them that a mutual respect for one another's rights is the only guarantee for the safety of property. Mutual aggressions would soon destroy their little gardens. The children do not rob, and are thus acquiring habits of justice and honesty.

"Again, many of the operations in their little gardens require greater strength than one child is possessed of; they look for assistance to their neighbours, and it is given. This, to those who have not reflected upon this subject, may appear a trifle, but the harmony of society is greatly dependent upon the cultivation of good will and a readiness to oblige and assist; and any plan is worthy of consideration which can early make the value of this social quality evident to children, and can ground a habit upon it."

The plans pursued at Ealing Grove would require considerable modification in a school containing pauper children. It would not be possible to afford the stimulus of wages for labour on land not allotted to the children, nor could the profits of the allotments be given to children maintained at the expense of the rate-payers in the district school, but it would be desirable that the land should be divided into allotments among those boys who had acquired a certain amount of skill in gardening, and that a separate account should be kept for each allotment of the seeds and manure furnished and their value, and of the crops produced and their value, and the accounts thus rendered should from time to time be examined and certified by the master, and compared before the school. When an orphan or deserted child was about to leave the school to go into service, the account of his labour in the garden and elsewhere should be carefully examined before certifying his diligence, and the produce of his allotments and work might be considered in reference to the nature of the outfit granted him on leaving the establishment.

The products of the children's labour would have a certain value. Thus, for example, the establishment would be altogether supplied with vegetables from the garden cultivated by the boys. It is therefore desirable, before proceeding further, to remark that the object of setting the children to work is *not to make a profit of their labour, but to accustom them to patient application to such appropriate work as will be most likely to fit them for the*

discharge of the duties of that station which they will probably fill in after-life. If the hope of profit from the labour of the children be not considered subordinate to the great object of enabling them to earn their livelihood by the employment of the surrounding district, or in assisting them to contribute to the comfort of their households by the exercise of their skill during periods of leisure, the establishment would probably fail as a means of promoting the independence of the children unavoidably chargeable to the rate-payers from the ordinary casualties of life.

I have therefore mentioned the employment of gardening in the first instance, because, though more nearly allied to rural labour than to the occupations of cities, the cultivation of a garden by the artisans of large towns has always been found a most useful means of affording innocent recreation, and a productive source of comfort to the family of the working man. The superior condition of the artisans of Birmingham has long been attributed, in some degree, to the custom prevalent among them of hiring small gardens on the skirts of the town.

I now proceed to consider what other employment could be usefully taugh the child of an agricultural labourer.

Several of the workhouse schools are supplied with carpenters' tools and rough boards. The boys make their wheelbarrows, erect any small outhouses which may be required, fit up their tool-houses, make the desks, forms, and fit up the closets of the school, and do any other rough carpenter's work which may be required in the establishment. They are thus prepared to do any work of a similar description which might be required in ordinary farm service. A husbandman who could weather-board a barn would be preferred by a farmer, and would probably obtain superior wages. The premises selected by the Children's Friend Society for their industrial school at Hackney Wick were, when first occupied, in an almost ruinous condition. The dilapidations have been repaired, the breaches have been filled up, the roofs restored, and the wood-work renewed almost solely by the labour of the boys. When I visited the school, they were engaged in erecting a new building. The children have thus acquired a knowledge of the way to make mortar, to set a brick, to saw and plane a piece of wood, to drive a nail in a workmanlike manner; all which skill cannot fail to be useful to them as farm-servants, or in repairing dilapidations in their own cottages, or enabling them to make a bench to sit on. In a large establishment, coopers', cabinet, and other descriptions of wood-work might be introduced, and the produce of the boys' labour would be by no means inconsiderable, if a skilful artisan were employed to teach them.

The guardians of certain of the rural Unions consider it desir-

able that the children should learn to make a hurdle, an osier, or a "frail" basket, or a net; and such arts may be taught by procuring the attendance of an artisan during a certain portion of the day, twice or thrice weekly, until the schoolmaster and the children have acquired sufficient skill to pursue their employment without such assistance.

Some other employments might be taught with a view to enable the future agricultural labourer to contribute to the comfort of his household, without an expenditure of his earnings. Thus, the whole of the boys' clothes of the establishment should be made and mended by them, even if it were considered undesirable to rear any of them to the employment of a tailor. In the same way the whole of the shoes worn in the house should be made and mended by the boys, especially if it were considered desirable to train certain of the boys to earn their livelihood as shoemakers. Neither of these trades should, however, be further pursued than upon a careful consideration may be thought desirable; first, to train a few children as tailors or shoemakers, or, secondly, to give the rest of the children sufficient skill to contribute to the comfort of their households without an expenditure of their earnings. The hope of profit, beyond making and mending all the shoes used by the children in the house, ought not to induce the guardians to allow these employments to be pursued to the exclusion of others more appropriate to the future situation of an agricultural labourer.

In the prison for the correction of juvenile offenders, which has within the last two years been established on an improved system by the Dutch government at Rotterdam, all of these employments are taught the children, who appear to have acquired considerable skill, and this part of the moral discipline of the prison is considered eminently important in combination with the religious instruction and the rest of the training adopted. In many of the prisons of Belgium and France in which juvenile delinquents are detained, they are steadily employed in labour requiring skill, with the best moral effects, and with considerable results as respects the economy of the establishments. But industrial employment of a certain character is most fully developed in the prison of "*La Roquette*," at Paris; in which the juvenile prisoners acquire remarkable skill in separate confinement, as coppersmiths—makers of bijouterie—buckle-makers—gilders of wood—cabinet-makers—brass-chain makers—turners in copper—locksmiths—whip-makers—shoemakers—"frail basket"-makers, and in other trades.

The boys are also employed in the workhouses in plaiting straw hats, making straw mattresses, whitewashing the walls whenever necessary, in cleaning out their rooms, lighting the fires, &c.

The domestic management of the house affords opportunities of instructing the boys in cleaning knives and forks, shoes, windows, &c.; and at the weekly meeting of the guardians the oldest lads are most usefully employed in receiving and taking charge of the horses, when they are taught to wipe and clean the bridles and saddles, to take them off and put them on, to clean whatever gigs or chaises are in the coach-house, and afterwards to clean the stables, make up the bedding for other horses, &c. They are on such occasions required to manifest to the guardians habits of prompt attention which the master is requested to inculcate.

The employment adopted in similar establishments in the manufacturing districts would, of course, bear a relation to the trades of the neighbourhood, similar to that which the above-mentioned occupations have to the pursuits of an agricultural labourer. In seaports the example of the Stepney Board of Guardians, who have determined to form a maritime school for the training of children belonging to the parishes of Wapping, Shadwell, Limehouse, &c., is worthy of all imitation.

The domestic management of the establishment will afford considerable facility for the industrial instruction of the girls. The whole of the domestic arrangements should be made subservient to the training of the girls in all the arts of household service. For this purpose they should be divided into classes, which should be successively employed during such periods as may be found convenient in every part of the household duty. Thus, one class of girls would be engaged in scouring the floors, lighting the fires, and making the beds in the several wards; another class would be employed in the wash-house, where all clothes of the establishment should be washed; a third class would, in rotation, work in the laundry; and among the officers of the establishment it would be desirable to have a laundress to superintend the girls employed in washing, ironing, and making up the clothes of the establishment.

A separate establishment for children would enable the Commissioners to regulate the dietary, in such a way as to assist the schoolmistress in affording the children valuable instruction in such frugal cookery as it would be desirable that the wife of a labouring man should know. Books, treating on this subject, should be provided for the use of the school, and the reading and explanation of them should form a part of its regular routine; while the oldest girls should be employed, in rotation, in the kitchen, under the superintendence of the schoolmistress, in learning to cook such food as the wages of a labourer could ordinarily supply, in such a way as to ensure the most economical management of his means. The whole of the other duties of the kitchen and scullery should likewise be performed by the girls.

A portion of every day would of course be devoted to the ordinary instruction in knitting and sewing; but the children should likewise be taught to cut out and make their clothes.

No part of service is of greater importance than a proper attendance on the sick, and cases may occur in the school where the older girls may be employed not to supersede, but to aid, the proper nurses in attendance on the sick, under the direction of the medicaofficer.

From time to time the girls might be occupied in weeding and hoeing in the garden, as a means of instructing them in the outdoor employments of females in rural districts. They might also learn to wait upon the schoolmasters and schoolmistresses.

The success which has attended the efforts of the Children's Friend Society, to reclaim juvenile offenders, by the adoption of a similar system of industrial training in their establishments at the Brenton Asylum, Hackney Wick, and the Victoria Asylum, Chiswick, and of the directors of the Refuge for the Destitute, in their institutions in Hackney Road and at Hoxton, would warrant the Commissioners in requiring its adoption in a District school, or throughout the ordinary Union workhouses of England and Wales; and without such instruction it is evident that, whatever other system of training is adopted, the education of the pauper children can afford no effectual guarantee for their future independent subsistence by the wages of industry.

B. In proceeding to describe the methods of instruction and moral discipline which it might be desirable to pursue in a District school, no mention will be made of any plan which has not been subjected to the test of experience, and the utility of which has not been ascertained by personal observation.

The methods adopted by the National and Lancasterian schools are so well known that it appears unnecessary to describe them; but it may be important to mention other methods, an acquaintance with which is not so generally diffused, many of which are capable of being engrafted on the system of mutual instruction pursued in the National and Lancasterian schools, and the adoption of which might, it is hoped, enable these most important institutions to increase and extend their beneficial influence on the community. An imperfect outline only of certain of these methods can be drawn, and brief allusions made to others; but these hints may serve to awaken inquiry concerning their utility, and each system of instruction may thus be improved by the adoption of some element of another.

Every district orphan school should consist of—

1. An infant school;
2. A juvenile school, comprising—
A. An industrial school for boys;
B. An industrial school for girls.

The building and apparatus desirable to conduct an establishment containing these elements will be afterwards described.

In both the infant and juvenile schools of Scotland the boys and girls are trained together; and the following reasons are given for adopting this course:—

"To educate the boys and girls separately will be injurious to both, because it deprives the girls of the benefit of the concentrated answers produced by the stronger minds of the boys; and it deprives the boys of the quick perception, and sometimes deep feeling, evinced even by very little girls, particularly when Scripture narratives are under consideration.

"The boys require to be educated with girls, in order to soften the boisterous manners consequent on their exuberant animal spirits; and the girls require to be educated with boys in order that they may set more value on intellectual and moral qualifications, and less on frivolous show. It follows, of course, that, if boys and girls are trained together, there must be both a master and a mistress; for it will be readily granted that there are very few women who possess fine tact, varied information, delicate feeling, and a natural love of children, joined to great physical strength; all which are absolutely requisite for conducting an infant school.

"Female instructors alone have been tried before now; but the schools conducted by them have never succeeded any more than they would do without them. The voice alone of the master commands the attention of the giddy; there is a formality in all schools conducted by females alone, which is totally destructive of the liberty so essential towards the development of the infant mind. In the hands of a woman the reins of discipline cannot be loosened, because she feels the effort of again curbing them would be beyond her physical powers."

In any school in which this arrangement was adopted, the boys and girls would retire to their respective industrial employments as soon as the secular and religious instruction of the school was finished; and this classification would be maintained during all other hours of the day, excepting those devoted to secular and religious instruction in the common school-room.

The state of the discipline—the character of the children—and the means of moral control which exist, or may be brought into operation, deserve careful consideration in each school before the boys and girls receive religious and secular instruction in the same classes; and whenever it is deemed expedient to adopt this system, it would appear desirable to apply it in the first instance during the periods when religious instruction is given, or when the children are trained in singing, in both of which cases the change will be a natural adaptation of the practice which prevails during divine service.

For the attainment of the largest amount of benefit, it would be desirable that the child should have the advantage of the entire system of training proposed to be pursued, first, in the infant, and next, in the juvenile and industrial classes: though the prior instruction in the infant school is not absolutely necessary to the attainment of much of what the juvenile and industrial schools are calculated to convey unassisted by the previous instruction of the infant school.

In the infant school, the child is separated from the contaminating influence of the street or lane in which his parents reside. He no longer wanders about to contract filth and vice; his passions, under no wholesome restraint or guidance, daily growing in strength and distortion. It is required that he should be presented at the school cleanly in dress and person. His attention is aroused and captivated by a constant succession of infantile pleasures. He learns to rise, to sit, to march, to beat time in concert with his fellows; he is taught to sing—in the song some sound precept or some useful knowledge is conveyed. A picture or a living animal is produced, or a specimen from the museum, by which his acquaintance with the properties of natural objects is extended. When his vagrant fancy has been arrested, the teacher seizes the opportunity for instruction in other knowledge less capable of sensual illustration; an acquaintance with the leading facts of biblical history—a consciousness of the true basis of moral obligation—and a perception of the nature of religious duty—are sought to be imparted: before weariness ensues, the whole school is marched in regular order into the playground, singing: here the master has an opportunity of observing the development of character, and of rendering the playground the scene of moral training.

The peculiarity of the method of instruction adopted in infant schools is, that, by a skilfully devised system of interrogation, the master discovers the limit of the child's knowledge, but he avoids supplying the child with information solely by direct didactic instruction. Having ascertained what the child does not know, he leads it, by a carefully planned succession of questions, as it were, to infer the truth, and, by having made the attainment of this knowledge an act of pleasurable mental exercise, he not only renders the pursuit of knowledge agreeable, but gives it a stronger hold on the memory. Since the instruction is not simply *conveyed*, but is made to depend upon an accompanying exercise of the child's mind, it is evident nothing can be learned by mere rote, but, on the contrary, everything that is learned must be understood.

The garden and playground are made the means of teaching the children to play without discord, and with an absence of the faults of language and manner acquired in the street; of convey-

ing to them a sense of the importance of mutual forbearance, of the duty of protecting the weak, of the necessity of self-denial, of the inviolability of property not their own, &c. The frolic of the playground is not restrained by stern superintendence, but the master kindly assists in promoting order and goodwill, and occasionally, when the children return to school, makes any occurrence of the playground the source of instructive moral illustration by questioning the children respecting it, in such a way as to enable them to see clearly what is right and what is wrong.

The system pursued in the best infant schools is now so generally understood, that this brief sketch may suffice to depict its general features.

It is surprising that, while such a system is in course of general adoption in infant schools, the plan of teaching by rote should too generally prevail in the juvenile schools throughout the country; and I have chiefly been led to this brief sketch of the method of instruction adopted in infant schools for the purpose of suggesting the inquiry whether, if a similar natural system were adopted in juvenile schools, it would not be more profitable than that which is now pursued.

Infants between the age of two and six, trained by this method, acquire a much more systematic and extensive acquaintance with natural objects and natural phenomena—have a clearer perception of the true basis of moral duty, and a more lively interest in religion—than the older children who have not had the advantage of this method, though trained in schools to considerable expertness in reading, writing, and arithmetic.

The children in the infant schools would learn the *powers of letters* in small words, and afterwards their names, according to the phonic method invented by Labarre while a refugee in Holland in 1802, and since introduced into all the Dutch schools by M. Prinsen, and which is universally adopted in Saxony and other parts of Germany, and in Prussia. The apparatus used in Holland is simple and efficacious; but for perfect success in the introduction of the method into England, some *primers** on a new principle, as well as new cards, will be required. I am not acquainted with any school in England or Scotland where this system is at present successfully practised. The utmost pains would be taken to train the children to connect the learning of the art of reading with its use. To this end they would never be permitted to read even small words without showing that they understood what they read; and all arbitrary combinations of letters would be discarded. In the Glasgow infant schools little or no effort is made to teach children to read before the age of six; and whatever instruction in this art is conveyed, is a conces-

* These primers, with an accompanying manual for the use of teachers, will probably be published at an early period by the Committee of Council on Education.

sion to the wishes of the parents, contrary to the views of the directors. The phonic method, however, presents an easy solution of the difficulties which the directors have felt on this subject.

The discipline and instruction of these schools should be purely infantile; mental precocity is seldom attained excepting at the expense of the health, the reason, or the happiness of the child. In the moral influence of the infant school consists its chief value. The child of the infant school becomes attached to learning as a pleasurable exercise; and if the method pursued be not suddenly disturbed, he may be led from the infant into the junior classes of the juvenile school with scarcely a perceptible transition, and so onward to the higher branches of instruction.

The gallery is employed in the infant school as a means of arranging the children in a body under the eye of their teacher, and thus enabling him more readily to inspect and control them by arousing their attention, and bringing the sympathies of the body to act upon individuals. The concerted movements by which the teacher intersperses his instructions, and by which he contrives to get rid of momentary lassitude and inattention, are greatly facilitated by this arrangement. In the Glasgow model schools, considerable advantages are said to have arisen from the retention of this mode of assembling and instructing the scholars in a body even in the juvenile schools; and it is at once apparent that, as a means of assimilating the juvenile school to the infant school, and thus rendering the transition from the infant school to the juvenile less formidable to a young child, the use of the gallery in the juvenile school may be very important. The scholars in the juvenile school are almost all equally prepared for receiving certain lessons by the simultaneous method in the gallery as an undivided class. Much of the instruction in sound morals and religion, in which it is so important that the sympathies should be awakened, can be most successfully thus conveyed; and whenever the instruction is made mainly to depend on sensual illustrations by living objects, drawings, or models, the whole school may be readily instructed at the same moment.

In many branches of learning, however, degrees of proficiency will occur, requiring the division of the scholars into classes and their separate instruction; and the use of the gallery for the collective instruction of from 80 to 120 children should be confined to religious, moral, and industrial instruction, and to those familiar "object lessons" by which children are made acquainted with the natural phenomena within the range of their observation.

These classes may be more or less numerous, according to the number of children which the school contains, and the opportunity thus afforded for adopting a more minute classification. In the Dutch schools 50 children are, on the average, instructed in a class by one master. This class is often taught in a room com-

mon to it with other classes; but it is evident that, if some expedients were adopted enabling the superior master readily to inspect the proceedings of separate class-rooms, it would be exceedingly desirable that, when 50 children are taught in one class on the simultaneous method, they should receive instruction in a separate apartment. By the "mixed method" two classes may be conveniently placed in one room.*

The simultaneous and mixed methods of instruction, which are now adopted in the schools of Switzerland, Prussia, Germany, and Holland, form an essential feature of the internal economy of a school in which it is proposed to teach 40 or 50 children in each class. In order to enable the teacher to conduct this instruction successfully, the desks and forms should be arranged as in the Dutch schools, the scholars being all placed with their faces towards the teacher in successive lines of desks half the usual width. The scholars retain their places while the lessons proceed, the chief demonstrations being given on a large black board, suspended on the wall or on an easel opposite to the class. The teacher, during the reading, spelling, and writing lessons, sits on a platform, slightly elevated, opposite the centre of the first bench. The simultaneous method may be varied by interrogating individuals, by questioning the class and receiving collective or individual answers, and by receiving answers in writing from the class. Each of these methods would deserve particular description if that were not inconsistent with necessary brevity: and the method of arranging and communicating such lessons requires illustration with regard to each subject, which can only be properly given in a treatise on method, or in manuals on each department of instruction.

The Dutch schools are commonly divided into four classes, denominated, 1. the preparatory; 2. the elementary; 3. the middle; 4. the superior: the range of instruction given being greatly superior to that which is imparted in any of the schools of the working classes in this country; but I have no space for an enumeration of what is taught in each class.

In a large body of children the superior master and his wife would require the aid of assistant teachers. Instead of employing monitors to assist the superior master and his assistant teachers, it would be an improvement if the plan adopted in the normal school at Haarlem were pursued, viz., that certain of the more intelligent scholars (especially orphans), who exhibited considerable zeal and interest, and whose attainments were sufficiently advanced, were selected from the rest to be trained to the occupation of teachers. Such children should receive superior instruction at separate hours from the rest, and should be employed in conducting the classes when they were sufficiently prepared by

* *Vide* Minutes of Committee of Council, 1839, 1840, with plans of schoolhouses.

occasional practice to do so. These pupil-teachers would constantly acquire a greater degree of skill and knowledge, until they gradually became fitted alike by their attainments and their practical address to encounter unassisted the responsibilities and cares of teachers. As the pupil-teachers acquired skill, they should be permitted to obtain some remuneration, a modified form of apprenticeship being adopted to secure the completion of their course of training; at the termination of which a certificate of competency might be given to those who afforded sufficient proofs, on examination, of skill and general attainments.

The methods of Pestalozzi, as reduced to practice by M. Prinsen in the schools of Holland, appear worthy of adoption wherever the simultaneous or mixed method is introduced, both as respects reading, ciphering, and general instruction.

Among the more advanced scholars, and particularly the pupil-teachers, the art of committing to paper, from memory, an abstract of some passage read by the teacher or by the class, as preliminary to the composition of letters, &c., should be practised as one of the most important modifications of the simultaneous method. Such an exercise should generally, if not always, follow a gallery lesson.

The teacher should depend mainly for his success upon his powers of rendering the instruction he conveys attractive to his pupils, and he will chiefly be liable to failure in this respect when he deserts the natural method of imparting knowledge, and neglects to assist this method with the lights of constant and varied illustrations. Such a method will enable the teacher to rule rather by love than by fear. He will not endeavour to coerce his pupil to remember a general truth which he does not understand, but by presenting to him, in a plain and familiar manner, certain simple elements from which the general truth springs, he will enable him to understand and to remember it, at the same moment, by a pleasurable exercise of mind.

In a school in which these methods of instruction are adopted by a teacher of mild and persuasive character, there will exist little necessity for punishment, and all harsh and degrading chastisement may be at once discarded. It is also desirable that the motives for preserving activity and attention should not be derived from the temporary incentive of some immediate reward, but should arise from the natural attractions with which knowledge is invested, when a correct method of presenting its elements is pursued.

A systematic avoidance of the stimulus of inferior motives, such as the fear of punishment, the hope of reward, and the often unworthy rivalry for personal distinction on account of proficiency, which is accompanied with mutual heartburnings and jealousies, will enable the teacher to substitute in their place other motives

of a superior nature. Intellectual proficiency being an object of inferior value to the establishment of *good habits*, care should be taken that this proficiency is not attained at the expense of those moral qualities, by the persevering development of which alone good habits can be formed. To learn from the fear of punishment, the hope of reward, or the desire of personal distinction, can be only mischievous to the moral sentiments, though the intellectual progress under these stimuli be rapid. The teacher should strive to invest knowledge with its own natural attractions. If he is skilful, he will not need any more powerful incentive to induce the children to learn than the natural craving after truth, when it is presented in simplicity and with the force of novelty.

A plan of moral distinction is substituted in Lady Noel Byron's school at Ealing for the system of distinctions founded on intellectual proficiency alone. Good conduct is thus elevated above mere intellectual attainments unaccompanied by moral culture, and the sympathies of the children, as well as the attention of the master, are directed to the proper objects of *education*, as distinguished from mere *instruction*. The system is thus described:—

The boys take their places in school according to their respective abilities and intellectual proficiency only. They are made to understand that this arrangement is necessary for the purposes of instruction, but that it is not necessarily connected with merit or demerit. Each boy has to establish his character *each day independently of every other day*, and at his entrance into the school he wears a white badge as an emblem of that fact. At mid-day the white badge is changed for a red one, if his *conduct* have been good, or for a black one, if bad. The moral principles according to which such changes are made are not too numerous, or too minute not to be easily apprehended by the young. If any boy's conduct has not been sufficiently marked to deserve either the black or red badge, the white is suffered to remain. If a sudden transgression (of truth, obedience, honesty, or kindness) occur, the black badge is put on at the moment.

The master is thus relieved from the necessity of entering into general considerations of the boy's merits, and the appeal made to the sense of right and wrong amongst the boys relates simply to the fact under their immediate observation. By a succession of such living lessons they are gradually taught the essentials of their Christian duty, and a just public opinion is formed amongst them.

To keep alive at the same time the feeling that the conduct of the day does not *pass away* with the day, though each day has its own separate character, a register is kept of the number of red or black badges given to each boy, and at certain periods the sum total is made public. In this estimate, a fair allowance is made

for illness or inevitable absences, which may have deprived a boy of opportunities of receiving the testimonials in question.

The practical results at Ealing Grove are highly satisfactory. The registers exhibit the gradual increase of red badges among by far the greater number of scholars. No stimulation by rewards or punishments is used as an instrument to their moral progress: for if we make virtuous conduct too decidedly the means of present profit and pleasure, we in fact destroy the very motives we ought to rely upon, for the permanency of that virtue in the less retributive scenes of after-life.

The principles on which the methods of instruction should be based being indicated, illustrations of the application of these methods to each head of instruction will be given in treating of the things which should be taught in the juvenile school.

In teaching reading, the phonic method of Labarre and Priusen, already alluded to, will be found most effectual.*

While *reading*,† the methods pursued in the Sessional School of the church of Scotland, conducted by Mr. Wood, in Edinburgh, should be adopted. The explanatory and interrogative systems, as developed in his "Account" of this school, should be steadily pursued, and lesson-books employed, in conjunction with the Bible, the Testament, and the Book of Common Prayer, similar to the reading-lessons used in that school. These lesson-books commence with infantile instruction, and gradually ascend, through a series of interesting exercises, to other branches of knowledge, such as geography, natural history, the arts (especially such as are connected with agriculture and manufactures), biography, extracts from voyages, travels, &c. &c. By means of such lesson-books, not only is a large store of useful information conveyed, but the taste is formed upon a correct model, and the pupils are less liable to be attracted in after-life by the frivolous publications with which the press abounds, or to be led to seek a more dangerous excitement from licentious books.

The reading-lessons used ought thus to enable the teacher to lay the basis of an acquaintance with the elements of useful knowledge; but he should also be careful to convey, by means of oral instruction, such salutary information as may rescue his pupil from vulgar prejudices. He will thus be less prone to become the victim of sensual indulgence: he will also be less likely to be carried away by the current of popular prejudices and passions. Such instruction may be so conveyed as to banish the sense of drudgery from the discipline of the school, and such an acquaintance with the subjects of reading and oral instruction may

* A short time only will elapse ere these methods are transplanted from the Normal School at Haarlem into some of the establishments for the maintenance and education of pauper children in the neighbourhood of London.

† The teachers will ere long be enabled by the publication of a manual and lesson-books to adopt the phonic method of teaching reading.

be afforded as to determine the future direction of the efforts which the pupil may make after further knowledge. The efforts of the teacher will be greatly assisted by a collection of models, and objects in natural history, together with drawings of natural objects, &c. (See Apparatus.)

Among the books used in a workhouse-school, no class of works would be more useful than such as treat of the duties of workmen and servants in their domestic and social relations, and describe the best methods of gaining a complete acquaintance with any handicraft or art. Such a series is much wanted.

The principles upon which secular instruction should be introduced into the schools of the poorer classes, and the means of communicating such knowledge, are explained in a charge delivered by the Bishop of London in 1834, in terms which have raised the propriety of adopting this course beyond the range of legitimate controversy. "Religion," observes the Right Reverend Prelate, "ought to be made the groundwork of all education; its lessons should be interwoven with the whole tissue of instruction, and its principles should regulate the entire system of discipline in our national schools. But I believe that the lessons of religion will not be rendered less impressive or effectual by being interspersed with teaching of a different kind. The Bible will not be read with less interest, if history, for example, and geography, and the elements of useful practical science, be suffered to take their turn in the circle of daily instruction. On the contrary, I am persuaded that the youthful mind will recur, with increased curiosity and intelligence, to the great facts, and truths, and precepts of holy writ, if it be enlarged and enlivened by an acquaintance with other branches of knowledge. I see no reason why the education given to the poor should differ from the education of their superiors more widely than the different circumstances and duties of their respective conditions in life render absolutely necessary. One thing is certain, and it is a very important consideration, that, if we teach them the methods of acquiring one kind of knowledge, they will apply them to the acquisition of other kinds; if we sharpen their faculties for one purpose, they will be sure to use them for others. *Some* information on subjects of general interest many of them will undoubtedly seek to obtain; and it is plainly desirable that they should receive it from our hands in a safe and unobjectionable form. It is desirable also, that they should not be accustomed to consider, that there is anything like an opposition between the doctrines and precepts of our holy religion and other legitimate objects of intellectual inquiry; or that it is difficult to reconcile a due regard to the supreme importance of the one with a certain degree of laudable curiosity about the other. The experiment of mixing instruction in different branches of useful knowledge with

Scripture reading, and lessons on the truths and duties of Christianity, has been tried with success in the Sessional Schools at Edinburgh by a zealous and able friend of the poor, Mr. Wood, to whose publications on the subject I would refer you for further information. It has also been tried in more than one large parochial school of this diocese, and the results have been very encouraging. I am, therefore, desirous that additions should be made to the school catalogue of the Society for Promoting Christian Knowledge, adapted to supply materials for a more varied course of instruction than that which is ordinarily pursued in our schools."

*Orthography** should be learned chiefly by spelling the words which occur in the reading-lessons, and by writing from dictation such words as are likely to be used in familiar correspondence, and as are employed in the arts and business of life.

Writing should be taught first with the pen, on the method of Mulhauser, and when a certain proficiency has been obtained, writing on the slate from dictation should be practised.

Arithmetic, and particularly mental arithmetic, as successfully practised in the National, Lancasterian, and other schools; and especially the fractional arithmetic of Pestalozzi.

The method adopted by Mr. Wood, of Edinburgh, to convey a knowledge of words and their meaning, should be pursued in preference to the ordinary process of cramming the child with the incongruous series of a vocabulary. Mr. Wood's method is fully described in his "Account" of the Edinburgh Sessional School.

Geography should be taught by extending the pupil's knowledge of the geography of his own neighbourhood, and of its arts and productions, the employment and wages of its artisans and labourers, to that of his county, and then to the rest of Great Britain. Afterwards a more general acquaintance with the geography of the world, and especially of those parts which offer a sphere for the operations of enterprising industry, particularly the British Colonies, should be conveyed. A book on geography, based on an accurate account of physical features of the country described, written with the requisite simplicity, and rendered attractive by the illustrations which might be interspersed through its pages, would command an extensive circulation in workhouse and parochial schools. It is essentially requisite to remember that the geography of an elementary school is the *geography of industry and commerce.*

In seaports the workhouse school ought to contain a maritime class, in which both the industrial and other secular instructions should prepare (such of the children as volunteer) for the merchant service. A more enlarged and accurate knowledge of

* Reading-lessons adapted to systematic instruction in orthography are necessary, and will probably soon be published.

geography, skill in drawing maps, and an acquaintánce with the elements of the art of navigation, appear important in this department of instruction.

Religion. The Bible should be read daily in the school, and the lesson selected should be made the subject of interrogative and explanatory instruction by the master, as directed by the chaplain. This instruction should be conveyed at a period selected for that purpose, and forming part of the prescribed daily routine of the school. At the entrance of each child into the school, the parents or nearest relative should be required to state to what sect they belong; they should be informed that the Bible will be read daily by the children in the school at a certain period, that general religious instruction will then be communicated to them by the master, and that, if they desire it, the religious instruction of their child may be solely intrusted to the minister of their religion. On the entrance of the children into the school, the parents should also be told that a certain period will every week be set apart for the catechetical instruction of the children, which will be conducted or superintended by the chaplain; but that, if the parents desire that this catechetical instruction should be conducted by their religious teacher only, means will be afforded him of communicating with their children for that purpose.

Such arrangements are required by the securities provided to the natural guardians of pauper children by the 19th section of the Poor Law Amendment Act. The chaplain appointed to conduct the religious services of the house would superintend the religious instruction given by the schoolmaster, whenever the natural guardians of the children did not interfere. It is desirable that, under the superintendence of the chaplain, the religious instruction of the rest of the children should be conveyed in that form which may be best adapted to enable them to see and to feel how it ought to influence their conduct in the whole range of their domestic and social relations in after-life. The books employed to impart knowledge having a tendency to influence religious belief, and to convey instruction in the essential doctrines of Christianity, should be submitted to the chaplain for his approval. If any difference of opinion arise between the chaplain and the Board of Guardians respecting the use of any such religious books, the question should be referred to the diocesan. It will be the chaplain's peculiar duty to prepare the children for confirmation, and to prescribe the routine of instruction to be pursued on Sunday. On the sedulous and faithful discharge of the duties of the chaplain the Commissioners must depend for the regulation of the moral condition and guidance of the religious instruction of all children, not excepted from his care by the 19th section of the Poor Law Amendment Act.

The reading of the Scriptures should be conducted so as to exhibit the connexion of their several elements. Thus, in Mr. Wood's school in Edinburgh, a portion of history, of the Psalms, of the Prophets, of the Gospels, and of the Epistles, is read on successive days of the week, and an examination on what has been read during the whole week occurs on the Saturday, which is so conducted by the teacher as to exhibit the reflected lights shed by history, prophecy, the life of our Saviour, and the writings of his Apostles. Sunday evening is devoted to searching examinations in biblical knowledge, which afford proof of the extraordinary success of this department of instruction in the Edinburgh Sessional School.

The catechetical instruction of the children should be conducted under the direction of the chaplain, in the manner described in Mr. Wood's account of the Edinburgh Sessional School, the greatest care being taken to avoid the system of cramming the children with a formulary which, if not understood, or if explained only in a meagre manner, will prove a profitless exercise.

Whenever the parents of children desire that they should be instructed by their own religious teacher, one hour daily should be set apart during which he should have access to the school, and be permitted to instruct them separately from the rest of the children, and a portion of one day in each week should be devoted to such catechetical instruction as the teachers chosen by the parents may deem expedient.

In the Prussian, Dutch, and German schools, and recently in some English and Scotch schools, singing has been introduced as a branch of instruction, with signal advantage. The children are practised in such psalmody as is appropriate to the devotional services of the household. The routine of school discipline is also beneficially interrupted at the point where weariness and disorder ensue, by an exercise which diffuses new energy and harmony through the school. The children march into the school from the garden, the workshop, and the playground, singing such moral songs as have been introduced into infant schools with success; the intervals of any change of lesson or occupation are filled up with singing. We are also assured, that in Germany the cultivation of vocal music has had a most beneficial influence on the habits of the people; they have been, to a large extent, reclaimed from debasing pleasures by this innocent amusement.

In the prison for the correction of juvenile offenders at Rotterdam, I was informed that music was valued as an important element of the moral agencies employed. I heard the national anthem and some beautiful hymns sung by the boys in this prison, in a most impressive manner, from notes, with which each was furnished.

Mr. Hickson has rendered a valuable service to the public by the interesting and useful lectures which he has lately delivered on the importance of vocal music as an element of popular primary instruction.

The playground and gymnastic exercises are inseparable from a well-conducted juvenile school. The playground is well described by Mr. Stow as the uncovered, school, where the master has the opportunity of training the children in correct habits, and thus fostering in their development the principles with which he is careful they should become acquainted in the school. The playground of the school should therefore stand in the strongest contrast with the playground of the street or lane. The moral atmosphere of the school playground should be so purified by the careful exclusion of all vicious influences, that in the moment of the most unrestrained mirth there should be an unseen, but effectual screen from the contagion of bad example, and the errors which occur should be made the means of deterring the children from their repetition.

Building and Apparatus.

It is not improbable that in almost every county some workhouse belonging to a dissolved Incorporation, or to a large parish, would be found capable of being adapted, with slight alterations (which would probably consist in the erection of large schoolrooms), for the reception of 450 children, and the provision of the requisite workshops and apartments for the schoolmaster, schoolmistress, and other officers.

In some counties the Boards of Guardians might prefer to erect a new building, and I am therefore desirous of stating what ought to be the size of the school-rooms. The size of the day-rooms, dormitories, and domestic offices would be determined by very obvious calculations, but it may be well to enumerate them, and to describe the apparatus.

If a school were established on the foregoing plan for 450 children, a building would be required, containing—

1. A day-room, and three or four workshops for the boys.
2. A day-room for the girls.
3. A sitting-room and bed-room for the head schoolmaster and schoolmistress.
4. A sitting-room and bed-room for the assistant schoolmaster and schoolmistress.
5. Sleeping-room for three or four inferior officers, and a common-hall for them at the gate.
6. Probationary wards.
7. Sick wards.

8. Wards for the infected and for cases of contagious disease.*
9. Dormitories for boys.
10. Dormitories for girls.
11. An infant school.
12. A juvenile school.
13. Class-rooms capable of containing 50 children each.
14. A committee-room.
15. Kitchen, wash-house, and laundry, adjoining the girls' day-room.
16. Separate yards appropriated to the boys, girls, infants, the infected, and those on probation of each sex.

The annexed plans comprise these arrangements :—

* The great importance of providing wards for contagious diseases separate from the usual sick wards, and of considerable capacity, may be rendered more evident by an account of some facts which I have observed connected with the absence of such arrangements. Soon after my arrival in London, during a visit which I paid to one of the contractor's establishments for pauper children, I observed fifteen or twenty boys in the school to be affected with a slight and scarcely perceptible redness of the *conjunctiva*. I immediately suspected the presence of some contagious influence, and on inquiry found that eight or ten children had been sent to the common sick ward during the preceding week, being affected with inflammation of the eyes. I was immediately confirmed in my opinion that the disease was contagious. I sent for one of the managers of the establishment, and pointed out the children in whom I observed the inflammation in its first stage, recommended that they should be forthwith separated from the rest; and stated that, in my opinion, if this were not done, one half the children in the household (500 in number) would suffer from severe inflammation of the eyes, which might not be removed from the establishment for many months. My observations were received with little respect. I was confidently assured that I was in error, and I was therefore compelled to insist that the children I had pointed out should be separated from the rest and sent to the sick ward. On removing them thither, it was found that the ward was too small to hold them all, and, after I left the house, some of them, if not the greater part, were brought back to the school-room and mixed with the other children. The disease consequently made rapid progress. All attempts at classification were abandoned, on account of the want of sufficient arrangements for that purpose, and my prediction was ere long fulfilled, as from 200 to 250 children were affected with inflammation of the eyes, and many in a severe form. The greater part of these children continued thus affected from six to nine months, and some more than a year, and of course their education was suspended during this period. The contractor never adopted any sufficient means for separating the children thus affected from the rest, but at length removed them *to another children's establishment*. I need scarcely add that this neglect was met by my unqualified disapprobation, by repeated and strong remonstrances, and that I made every effort in my power to remedy the evil. About the same period, on visiting the workhouse appropriated to girls at Mile End in the Stepney Union, I found that owing to the medical officer of the Union having failed to recognize the contagious character of the disease, ninety children were affected with this form of ophthalmia in this workhouse. I immediately applied to the Board of Guardians, who, without any delay, removed all the children thus affected into an unoccupied workhouse. The progress of the contagion in the school ceased from that day, and the children who were removed rapidly recovered, with the exception of about a dozen, who, for a long period, remained the victims of a very severe and obstinate form of ophthalmia. The contractor and the Board of Guardians stand in instructive contrast.

Had these children been allowed to remain mixed with the rest of the school, the consequences would, doubtless, have been similar to those which occurred in the establishment of the contractor, whose ignorance, obstinacy, and selfishness occasioned so much evil to the children.

*School-rooms and Apparatus.**

1. Infant school. A school-room, 54 feet long by 27 wide, and 15 feet high, will accommodate 200 scholars. The school-room should be on the ground-floor. Class-rooms should be connected with the school-room, in which the master, assistant-master, and teachers, in course of training, may conduct the instruction of classes separately from the rest of the school, or in which a teacher attending the school for instruction may conduct a miniature school, before he attempts to manage and control the entire body of the scholars in the larger gallery.

For this latter purpose, the class-room should be fitted up according to the plan prevalent in the Dutch schools, *i. e.* by the arrangement of the desks and forms so that all the children may sit with their faces towards the teacher, and may thus be instructed and governed by him. Four or five lines of desks and forms would thus be arranged in front of the teacher, each succeeding desk being somewhat higher than that nearer to the teacher.

The separate class-room would also enable the master to convey instruction to the pupil teachers in various parts of the system, separately from the school. Among the school apparatus, a collection of natural and artificial objects calculated to induce a spirit of inquiry and observation, the ball-frame, maps illustrative of sacred history, and other apparatus in common use in infant schools, should be provided. An essential adjunct to the infant school is the playground, with two circular swings, and other gymnastic apparatus. The playground should be surrounded by a broad border, in which flowers and fruits should be cultivated.

The apartments of the schoolmaster and schoolmistress should adjoin the school and day-room.

The juvenile school-room for 200 children ought to be of the same size as the infant school. For the reasons previously stated, the boys and girls might, under certain restrictions, be taught together. The benefits derived from this association under correct moral training, are said to extend, beyond the manners, to the habits of the children.

The gallery, hitherto used only in the infant schools in England, should be preserved in the juvenile schools, for the purpose of giving instruction in general religious knowledge, and object lessons, but all technical instruction should be given in classes of not more than forty children.

* In the annexed plans the school-rooms are exactly similar to those recommended in the Minutes of the Committee of Council on Education, and are improvements on those originally suggested in connexion with this text, which is not intended to apply to them.

2. The juvenile school should also be provided with a museum* of natural objects classified, as a means of a higher and more systematic instruction than that pursued in the infant school—maps of the district of the county, and large maps of the geography of commerce and industry will be required—drawings illustrative of natural phenomena, of agricultural and manufacturing machines, of natural objects, models of solid forms, &c.; black boards on which the teacher may exhibit, in chalk-drawings, illustrations of the lessons he wishes to convey, and on which the children may draw maps, should be provided—books, including the Bible, Testament, the Book of Common Prayer, and the Lesson-books and Catechisms.

The playground is an inseparable adjunct of the juvenile school. It should be provided with more extensive gymnastic apparatus than the infant school, and should be surrounded in a similar manner with a broad flower-border. In seaports a high mast, with yards, sails, and appropriate rigging, is a necessary adjunct to the industrial department of the school.

Three or four smaller rooms, adjoining the main juvenile school-room, will be required as class-rooms for religious instruction, for the separate training of classes, and for the instruction of the pupil teachers attending the school, and also to enable them to conduct a miniature school.

3. If a temporary shed were used as the tool-house and workshop, the boys might be employed in the erection and fitting up of a more extensive and complete one. The boys' workshop should be neatly fitted up by *them* with racks for implements, boxes and shelves for tools, and benches for their various kinds of employment. They should also make their own barrows, baskets, and hampers, and garden mats and nets They should be provided with spades, hoes, rakes, pickaxes, riddles, and with a chest of carpenters' tools, some rough deal boards, bricks, lime, &c. If the boys were enabled to put up a large wheel with which to turn a lathe, they might make all the brushes for the house, and do much other useful work.

Board of Management.

If a district school were established on the foregoing principles it would become necessary to construct a Board to superintend the management of the house and the training of the children. For this purpose two or three of the most intelligent Guardians

* It would be desirable that, in every district school which may receive a teacher from this model school, means should be taken to establish a museum, in which specimens of art, and the natural objects of the parish, should be collected and correctly classified. This is accomplished in the parish of Kinghorn, in Scotland.

of each Union should be selected, and it might be desirable to require in some districts, as a qualification for the important duties confided to the Board of the district school, that each member of that Board should have served one year at least as a Guardian of his Union. It would probably be sufficient that the whole Board of Management should meet monthly at the school, but a rota of three or four members should attend weekly to superintend the execution of the directions left by the general Board of Management, and to meet any emergencies which might arise.

Children might be admitted into the school at the end of each month from the several workhouses of the district, and it should be required, wherever such a school was established, that no child of the classes enumerated, as more permanently dependent on the rate-payers for maintenance and education, should reside longer than one month in the workhouse of the Union to which he belonged. It would thus be necessary, that the master of each Union workhouse should, once every month, convey such children to the District school: he would on that day attend the Board of Management, and would receive from them a report concerning the progress made by the children of the Union to which he belonged, and especially enumerating those to whom the Board could grant certificates that their moral conduct, industry, and skill warranted the Board in recommending them as prepared for domestic service.

If it were necessary to purchase or hire land or buildings, or to erect a suitable house, the Board of Management should be intrusted with the requisite authority, as well as to enter into contracts for supplies, and to direct contributions for the current expenditure.

The Board should also be required to render full accounts quarterly to each Union of the whole expenditure incurred for establishment charges, and for the maintenance and clothing of each child respectively.

The establishment expenses should be distributed as a common charge to the Unions, in the proportion of their averages; and the cost of the maintenance and clothing of each child should be carried to the account of its parish.

The applicability of these principles of school discipline and management to the schools of Union workhouses remains to be determined.

I have already enumerated the obstructions to their application to the schools of Union workhouses, which arise—

1. From the want of a sufficient number of children in each school to enable the teachers to establish a correct classification of their scholars.

2. From the interruptions occasioned by the constant admission and discharge of children.

3. From the occasional association of the children with the paupers maintained in the workhouse.

4. From the loss of self-respect among the children.

5. From the difficulty of procuring a sufficient number of well-qualified teachers, and insuring their continued residence in the school for the salaries offered.

6. From the comparatively greater expense attending the establishment of efficient arrangements for several schools containing only a few children than for one school containing many children.

Improvements have been introduced into the schools of workhouses,—

1. By procuring teachers from various establishments for education. The Central National School, Westminster: the Borough-road School: the Edinburgh Sessional School: the Glasgow Normal Seminary, &c., have been resorted to for a supply of teachers, who have been procured with great difficulty. Some of these, and of the provincial teachers, have undergone further training in the processes of industrial instruction pursued at the Brenton Asylum, Hackney Wick, at the Victoria Asylum, Chiswick, and at Lady Noel Byron's school, Ealing; which methods are also successfully adopted by the Directors of the Refuge for the Destitute, in their establishments at Hoxton and Hackney. The general acquirements and the knowledge of methods of instruction attained by the teachers trained in the Edinburgh and Glasgow model schools have occasioned numerous applications to be made for assistance from these establishments.

2. The employments of gardening, carpenters' work, tailoring, shoe-making, straw-plaiting, basket-making, or net-making, &c. &c., have been introduced into several of the workhouses for the instruction of the boys. The girls have been trained in knitting, sewing, scouring, bed-making, washing and ironing, straw-plaiting, and sometimes in cooking. The girls need a wash-house and laundry separate from that used by the adult females, with whom, for obvious reasons, association should be avoided. In the selection of persons qualified to instruct the children in the various handicrafts, the fullest inquiry should be made into the moral character of the candidates; and it is of great importance that they should be persons of cheerful dispositions and good temper.

3. Care has been taken to supply the schools with the Bible, the Testament, the Book of Common Prayer, the Lesson-books of the National Schools, of the Society for Promoting Christian Knowledge, of the Edinburgh Sessional School, and of the Commissioners of Education for Ireland. Some workhouse schools contain small libraries of religious and useful works, which are read with great interest by the children.

4. The schoolmaster and schoolmistress have been furnished

with approved works on the art of teaching, describing the methods of instruction which have been most successfully adopted. Among the books have been comprised "Wood's Account of the Edinburgh Sessional School," "Stow's Moral Training," "Abbott's Teacher," "Dunn's Normal School Manual," "Chambers's Infant Education," "Brigham on the Influence of Mental Cultivation upon Health," "Forss's Account of the Brenton Asylum, Hackney Wick," &c., books on gardening, frugal cookery, &c. One or two of the teachers who were acquainted with French, were put in possession of Manuals of Method in that language, superior to any which exist in our own, and translations from the German and Italian have been circulated among them in manuscript.

5. Suitable apparatus has been supplied to many of the schools. (See Apparatus.)

The small schools of the rural workhouses must, however, for some time remain defective in many important characteristics of a well-regulated school.

It is desirable to exhibit continually to the Board of Guardians the great importance and honourable nature of the functions of a teacher. In order that the schoolmaster of the workhouse may be placed in his proper station in the household, he should be supplied with a separate apartment, comfortably furnished, and should be allowed to take his meals in private, or with the superior officers of the household. The visiting committee should not permit the time of the schoolmaster or schoolmistress to be expended on duties connected with the internal economy of the workhouse, it being desirable that their whole time and attention should be devoted to the school. Though the master of the workhouse is superior in authority in the household, he should remember that the schoolmaster or mistress ought on all occasions to be consulted concerning the domestic management of the children, and that their moral training and instruction are committed to his or her care, subject to the directions of the Board of Guardians alone. The emoluments of many of the workhouse schoolmasters are so meagre as to prove how low an estimate of the services of a teacher has been made; but a juster view of their importance is diffusing itself.

In a small workhouse school one-half the floor should be covered with desks and forms, arranged according to the Dutch method, as described in a previous part of this paper, the rest of the floor being left vacant for the division of the children into separate classes, whenever that is expedient. The master's or mistress's seat and desk should be placed on a stage, about six inches high, in front of the first row of desks.

The master should be furnished with a shelved closet or cupboard for books, apparatus, &c. The books, apparatus, and tools, previously alluded to, should be furnished to such an extent as

may be required by the number of the scholars. Whenever the chaplain attends the school to superintend the religious instruction of the children, the master should relinquish the task to him, and assist in the instruction to such an extent as the chaplain may require.

The chaplain's reports will relate to the department of religious instruction and moral training.

In the other departments of instruction the schoolmaster should, with the assistance of pupil teachers, or of his most advanced scholars, be required to keep books in the following forms, which should be presented with the chaplain's report every week to the Board of Guardians:—

JOURNAL of RELIGIOUS and SECULAR INSTRUCTION.

Name of Child.	Monday.												Tuesday.											
	Reading Bible and Testament, and Instruction in Catechism.		Reading Grammar and Etymology from Lesson-books.		Writing on Mulhauser's Method.		Arithmetic on Pestalozzi's Method.		Geography of Commerce and Industry.		Drawing from Models on Dupuis's Method.		Reading Bible and Testament, and Instruction in Catechism.		Reading Grammar and Etymology from Lesson-books.		Writing on Mulhauser's Method.		Arithmetic on Pestalozzi's Method.		Geography of Commerce and Industry.		Singing by the method of Wilhem.	
	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To

And so on for the rest of the week.

* JOURNAL of MORAL CONDUCT during the HOURS of INSTRUCTION and RECREATION for the Quarter ending

Name.	Week ending							Week ending							Week ending							Week ending							Week ending							Week ending							Week ending						
	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.

And in like manner for the rest of the quarter.

* See previous account of plan pursued at Ealing Grove School.

Boys' Journal of Instruction in Industry.

Name of Boy.	Monday.												Tuesday.											
	Gardening.		Tailoring.		Shoemaking.		Carpenters' or Cabinet-makers' work.		On the Mast: and Drilling.		As Black-smiths and Whitesmiths.		Gardening.		Tailoring.		Shoemaking.		Carpenters' or Cabinet-makers' work.		On the Mast: and Drilling.		As Black-smiths and Whitesmiths.	
	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To

And in like manner for the rest of the week.

GIRLS' JOURNAL of INSTRUCTION in INDUSTRY.

Name of Girl.	Monday.												Tuesday.											
	Knitting and Sewing.		Scouring and Bed-making.		Washing, Ironing, and Mangling.		Cooking.		Straw Plaiting.				Knitting and Sewing.		Scouring and Bed-making.		Washing, Ironing, and Mangling.		Cooking.		Straw Plaiting.			
	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To
And in like manner for the rest of the week.																								

The arrangement of the school routine, and the punctual observance of it, deserve the special attention of the visiting committee. This routine may be variously settled; but it may be useful, in order to facilitate such arrangements, to give a specimen of the succession of employments during a single day in summer, in a rural workhouse school. In this example the industrial training is pursued in the morning, both because work can be more easily performed in the garden at that part of the day, and because the employments of the girls require their absence from school in the morning, while, in a workhouse containing few children, it may be necessary to instruct the boys and girls at the same hours. But the scheme of engagements may easily be modified by transferring these occupations to the afternoon: —

Half-past five, A.M.—Rise, wash, and dress. The monitors are to preserve order.

Six o'clock.—Make beds, scour rooms, light fires, brush shoes, clothes, &c. Preparing the vegetables for the meals, &c.

Twenty minutes past six.—Assemble in the school-room; rolls read by schoolmaster and schoolmistress, each child answering to his or her name; absentees noted. Children inspected, to ensure cleanliness of dress and person.

Half-past six.—The children proceed in an orderly manner to the dining-hall; prayers are read; a hymn sung, in which all the children join. Breakfast.

Quarter-past seven to eight.—Recreation in the yards; gymnastic exercises and healthful games; or exercise on the mast.

Eight to eleven.—In weather suitable for out-door employment, the boys shoulder their tools and proceed to the garden, where they are employed in skilful culture under the instruction of the schoolmaster. At other seasons useful in-door employment (such as making baskets, carpentering, shoemaking, tailoring, white-washing, and repairing the premises) is pursued; and an effort is made to mend and make all the boys' clothes and shoes in their department of the house.

During the same period the girls ventilate the bed-rooms, make the beds, scour the floors, clean the dining-hall. Certain of the older girls are employed in the wash-house and laundry, or in the kitchen, till noon, or to a later hour.

The children should return to the school-room, carefully wash their hands, arrange themselves in a line to be inspected by the schoolmaster and mistress at eleven.

From eleven to twelve the oldest boys and girls read a chapter in the Bible or Testament; after which the master and mistress ascertain how much they remember of the narrative, &c., read, interrogate them respecting its purport, and instruct them in its relations to the rest of Scripture, and the practical influence it ought to have on their conduct. In such instruction the directions

of the chaplain guide the teacher. The younger children meanwhile learn to repeat a hymn, which is read to them for that purpose by a pupil-teacher or monitor.

Twelve.—Children proceed to the hall and dine.

Half-past twelve to two.—Recreation, gymnastic exercises, and games in yards, and exercise on the mast.

Two to five.—The general instruction of the school will proceed; a routine being prepared describing the occupation of each class on every hour in the day and every day in the week. The pupil teachers should likewise have the order of the lessons they impart arranged by the schoolmaster, who should devote two hours every evening to their instruction separately from the rest of the school. The pupil teachers may be so trained as to become as they grow up invaluable assistants to the master, not only in imparting instruction, but ultimately in regulating the moral discipline of the school. The whole instruction should be so regulated as to fit them to become industrious, intelligent, and religious working men. Industry should be associated with all that is cheering, and its intimate connexion with the labours of the intelligence should be made apparent. Our dependence and our hopes should be shown in the light of religion.

Five to six.—The children are all instructed in singing in the dining-hall.

Six o'clock.—Supper. After supper prayers are read, and a hymn is sung by the whole of the assembled inmates.

The children then return to their schools, where the schoolmaster and schoolmistress address any remarks to them which may be suggested by the proceedings of the day.

To accomplish the few and simple objects proposed in this scheme, a teacher of mild and persuasive manners, carefully trained in the best methods of instruction, ought to be selected.

Certain sanatory precautions are necessary in all establishments in which many children are assembled. The liability of all children to contagious maladies, and the frequency with which pauper children are affected with certain other infectious diseases, render great care necessary in the cleansing of the children on their admission. They ought also in all cases to be minutely examined by the medical officer in the receiving wards before they are mingled with the rest of the children.

Each establishment should be provided, besides the common sick ward, with separate wards:—1. For the separation of children affected with scabies or itch. 2. For children with tinea capitis, or scald head. 3. The ward for the reception of other infectious maladies (such as ophthalmia), and contagious diseases (measles, scarlatina, and small-pox), should be large enough to admit of the complete separation of a considerable number of the children on an emergency. Wherever the children are numerous,

a yard for the exercise of convalescents should be attached to their wards.

The probationary wards and infirmary should be supplied with baths, and a separate wash-house should be attached to the latter department, because certain infectious diseases are likely to spread if the children's clothes are washed in the same building.

The ventilation and warmth of the wards and school-rooms require great attention. Dr. Arnott's report on this subject renders other remarks superfluous.

Not more than two children above seven years of age should be permitted to sleep in one bed, and boys above twelve should sleep in single beds.

In new buildings the size and height of the school-rooms and wards, the means of ventilation and warmth, the drainage, &c., of the premises, should all be matters of careful and precise regulation.

I have the honour to be, Gentlemen,

Your obedient servant,

JAMES PHILLIPS KAY.

To the Poor Law Commissioners.

ON THE TRAINING OF PAUPER CHILDREN.

Supplementary Note to the First Chapter.

IMMEDIATELY after the preceding Report was written, I was directed to accompany Mr. Nicholls in a visit to Holland and Belgium, for the purpose of examining officially the institutions for the relief of the poor in those countries, and the Flemish husbandry on small six-acre farms. During this tour I had an opportunity of examining, with considerable care, certain of the orphan houses which are so numerous in all the great towns of Holland, the prisons, and the principal schools of Holland and Belgium. This supplementary note is extracted from my note-book of observations made during this tour. More recently I revisited the schools of Holland, and examined them with as much care as an imperfect knowledge of the language would enable me to bestow. The notes of that latter journey, however, relate almost exclusively to the details of the structure, organization, and discipline of schools, and especially to the very important department of method. The subjects discussed in these pages do not render those observations useful for the purpose of illustration.

The prison in which juvenile delinquents are confined at Rotterdam contains adult criminals, but a complete separation is maintained between the children and adults. The institution has only recently been developed, and no separate building has yet been appropriated to the reception of the boys, whose redemption from criminal habits is the object of the moral discipline recently introduced within the walls of this prison. The boys confined here are condemned for periods varying from six months, to two, three, or six years; and one boy in the prison had been sentenced to 15 years' confinement. The prison is a substantial brick building; the rooms are everywhere lofty, well ventilated, and clean. It contains 111 young prisoners under 18. The boys are divided into three classes; the first class is distinguished from the others by a black collar worn by each boy. This class contains 22 boys, all of whom, excepting two, had been in the school before; but from this fact it would not be right to draw an inference prejudicial to the efficiency of the discipline maintained in the prison, because the institution has been established only two years,

and its effects on this class of children cannot therefore at present be appreciated. The boys in this class have been a second time convicted of crime, or for the first time of crimes evincing a greater degree of turpitude; or they are boys whose conduct in the prison had merited degradation, and appeared to require severer discipline. They are not allowed recreation; in proceeding from the yard to the workshop or school-room they follow each other in a line, and are forbidden to converse or communicate with each other during the day-time. At night they sleep in separate hammocks, and silence and order are strictly maintained in their dormitory, by a sentinel placed in a situation enabling him to observe all that occurs in the apartment. The discipline of this class is in every respect more severe than that of the two other classes.

The second class consists of boys who have conducted themselves in the prison with greater propriety, or who were convicted of smaller offences. This class contains 40 boys, distinguished by a stripe of black cloth upon the collar. They are allowed to walk in pairs to and from work, exercise, and meals. No other recreation, except walking the yards, which are small, and inclosed by the building three or four stories high, is allowed. If the boys in this class conduct themselves well, they are promoted to the third class.

The third class consists of boys who have shown better dispositions in the school, or have been committed for the smallest offences. They are 49 in number. They are allowed two or more hours of unrestrained recreation in their yard, and the discipline affecting this class is in every respect more lenient than in the two former classes.

Each of the three classes has a separate day-room, sleeping-room, and yards, and they are not allowed to mingle, excepting when under the eye of the schoolmaster during the hours of instruction, and when all communion is precluded.

In the work-rooms the young prisoners are instructed in trades. On entering the prison, each boy is called upon to choose the trade which he prefers to acquire, and he is accordingly attached to the person entrusted with the instruction of the children in that department of industry, his attention being concentrated on the particular trade which he has selected. The materials for the work are chiefly sent into the prison by tradesmen in the town, and tariff prices are fixed for the regulation of the payments required in return for the labour. We were assured that the prices are so fixed as not to occasion an injurious interference with the ordinary manufacturer. One-half of the profits of the labour of the boys is retained by the Government to meet the expenses of the establishment, maintenance, and education of the prisoners; two-fifths of the remaining half are given to the prisoners in a coin used only in the prison, and are expended by them in pur-

chasing such things as soap, and other necessaries, at a cantine established in the prison for that purpose; the remaining three-fifths of the half are retained as a fund, which accumulates until the young prisoner is fitted to be restored to the world, and which is intended to enable him to obtain a suitable outfit, or to be expended as a premium of apprenticeship, or in some similar manner to facilitate his settlement in an honest and industrious calling.

We found that 30 of the boys were in course of training as tailors, and 16 as shoemakers. Boys who are admitted for periods less than a year, are employed in making nets, the twine being sent into the prison to be manufactured; or in sorting wool, which is also sent thither for that purpose, the price of their labour being regulated by the tariff.

The cantine is conducted by a person appointed and paid by the Government. The profit arising, after the salary of the officer and all other outgoings are defrayed, is divided at certain periods among the young prisoners, as a reward for their good behaviour and attention to their duties.

The cantine must be the source of abuses. If luxuries are allowed to boys detained for crime, wholesome discipline may gradually be perniciously relaxed by a constant succession of slight concessions, to which form of degeneration the regulations of such establishments are peculiarly liable.

The children are said to be taught reading, writing, arithmetic, geography, history, the catechism, singing, both of national airs and school songs, and devotional hymns. Religious instruction is evidently an object of much solicitude, and the improvement of the morals was declared to be the main and ultimate object of the whole system of training and instruction.

The children are catechised every Thursday. The Protestants are then examined by a "Catechiser," who is of their faith. The Catholics are instructed by their priests, who attend every week for that purpose, as do also the Presbyterian, Lutheran, and Reformed Dutch Protestant ministers. On all occasions of catechisation, the Protestant children are instructed separately from the rest of the school. We heard the children sing with perfect precision of time and tune, the national song, a hymn, and a solemn psalm tune. The decorum of their manners during this exercise, and also during a brief extempore address delivered by the schoolmaster, inspired us with a belief that the moral discipline of the school was in an efficient state.

The exercises in the yards consist chiefly of military movements, marching, countermarching, &c., in perfect silence. In writing, the boys appeared to have made great progress. We had no opportunity of witnessing the methods of instruction pursued, as the day of our visit was devoted to catechisation.

When the boys have completed the period of their confinement, if they can produce satisfactory testimonials of their conduct while in the prison, they are not unfrequently assisted by the members of a benevolent society, who endeavour to procure situations for them in service, and sometimes pay the premiums which are required.

The internal economy of the prison for juvenile delinquents appeared to comprise a more consistent system of penal discipline, instruction, and moral management than any establishment of the kind which I had previously visited. The defect appeared to be that no sufficient security was provided for the maintenance of the correctional discipline, and that its present state was unsatisfactory. It would seem expedient that the boys beyond a certain age *should sleep and work separately after the hours of school.* Any argument employed in favour of a relaxation of the claims of the law that punishment shall follow crime, if applied to children above 12 or 13, necessarily also includes adults in the same category, for the intellect is mature at puberty, though it is not fully informed by experience. Though, therefore, I approve the instruction, the reformatory management, and moral agencies employed in this prison, and think they may be with great advantage extended and improved, I am of opinion they ought never to be altogether substituted for, or to displace the penal discipline by which crime is rebuked by the law.

The orphan asylums of the great towns in Holland may also afford a few points of illustration and warning. I select the Orphan Asylum of the city of Amsterdam as an example.

Besides this house of refuge for orphans, each of the religious sects in Amsterdam has one at least equally extensive, if we may judge from the exterior of the Catholic Orphan House, which is even more extensive and more magnificent than that belonging to the town. On entering the house, we found the chief director in attendance to conduct us over the establishment. We were ushered into the board-room, which contained some excellent paintings by Ovens, of the Court of Directors engaged in deliberating respecting the admission of children into the establishment; also a painting of Speyght in the act of blowing up his ship opposite Antwerp, and another painting of the ship exploding in the roads of Antwerp. Speyght had been educated in this orphan house. The King had likewise sent to the directors the sword, epaulettes, and decorations of an officer who had received his early training in this house, and had subsequently distinguished himself and fallen in the service.

From this room we proceeded to the dining-hall, where we found the elder girls at dinner. The dining-hall was from 25 to 30 feet high, and from 60 to 70 feet long. If the array of directors in their steeple hats, broad white plaited collars, black velvet

coats, and huge ruffles, which Ovens had left as a record of the state in which their functions were discharged, in order to inspire their successors with a sense of the dignity of their office, had somewhat astonished us, our wonder increased when we were led into this spacious hall. Seventy or eighty girls, from the age of twelve or fourteen to that of twenty, were at dinner. These were only a small portion of the girls maintained in the house, which contains two hundred and twenty orphan children. It was the Easter fête, and the girls were attired in their usual Sunday dress: this consists of a richly embroidered muslin cap tied in a knot at the back of the head, with two long silver pins, terminating in a large silver ball, inserted in the cap at the temples, and projecting above the brow. Underneath the cap, on either side of the head, were golden ornaments, either fastened in the hair, or encircling the back part of the head. Most of the girls wore necklaces with a golden clasp in front. The fine white muslin kerchiefs which covered their necks were fastened with a golden pin in front, and we observed several who wore four or five golden rings upon their fingers. The director informed us that the caps and silver pins were the property of the establishment, but that the golden ornaments, necklaces and rings, were heir-looms belonging to the orphans' families. These heir-looms appeared to be universally possessed. The gown was stuff, one half of which was either a very dark brown or black, and the other half scarlet. The effect of this rich and grotesque costume was increased by the perfect whiteness of the embroidered head-dress and neckkerchief, and the proverbial neatness which characterises the dress of the Dutch females.

Being a *jour de fête*, the dinner consisted of a huge piece of currant cake, with butter and six eggs for each girl. The demeanour of the orphans was respectful and contented, and the manner in which they were greeted by the director and the female superintendent was full of kindness. From the dining-hall, we visited the room in which they knit and sew. This was an excellent specimen of the internal comfort and neatness of a Dutch house. The sides of the room were lined with large presses, in which the linen sewed by the girls was kept. We learned that besides the necessary work of the house, other work is taken in from the bourgeoisie, which is executed at a somewhat smaller price than that given to sempstresses in the town, being for that purpose regulated by a tariff. The most remote suspicion of the injury thus inflicted on those who were struggling to maintain themselves above the degradation of dependence did not appear to be entertained. Our inquiries were met by the remark that the work was executed for the bourgeoisie, by whose contributions the establishment was supported.

We proceeded to the kitchen and other domestic offices, the

yards, the bed-rooms, the sick-house, &c. All these departments were in an admirable state of neatness and order. In one of the bed-rooms we were shown a series of deep square recesses or pigeon-holes, and some of the young women were in attendance to exhibit to us the exquisite cleanliness of the dresses and linen which each orphan girl had in store in these receptacles. The Sunday and week-day cap, the neckkerchief, the gown, &c., were all displayed with evident feelings of satisfaction.

We passed over to the boys' side of the house. Unfortunately they were all at church; but we inspected the hall where the children are catechised, and also the workshops, viz., the carpenters' shop, the tailors', &c.

The simultaneous system of instruction which pervades Holland was adopted in the orphan school. By that system the children were taught to read and write, were instructed in arithmetic, geography, national history, and acquired sufficient skill in singing to enable them to accompany the congregation at church. The girls also are taught to knit, to sew, to cut out clothes; they wash, iron, clean the rooms, cook, and perform all the domestic duties of the household, so that they are perfectly well prepared for domestic service.

The boys are to a certain extent taught tailoring and carpenters' work, &c., in the house; but they chiefly receive instruction in industry out of the house, for which purpose they are sent to persons pursuing handicraft trades in the town, to learn their several arts, viz., to clockmakers, shoemakers, carpenters, millers, &c. &c. The service is in the first instance given in return for the instruction, but in course of time the boys earn wages, and are at length able to support themselves. The girls come in at all ages, and remain to twenty or twenty-one.

The children are of all religious persuasions; and their religious instruction is confided to the teachers of their respective sects. They go out on Sunday to attend the service of their sect at church.

The strictest separation of the sexes is at all times preserved; hired female servants being employed to perform all the domestic duties of the boys' division of the house.

The establishment is under the direction of six directors, who are chosen by the king, and are directors for life. The eldest is denominated "Father." The children saluted the director and the superintendents of the several departments with demonstrations of respect and gratitude wherever we moved.

We inquired whether the director thought that the children of the poorer classes obtained as much and as good food, clothing, &c., as the orphan children maintained in this asylum, and he answered with marked satisfaction that these children were much better off than the generality of the children of workmen.

The establishment is supported by funds derived from the rents of houses and land, and from the interest of moneys in the public securities. The whole direction and control appears to be in the hands of the six directors appointed by the king. No accounts are published, and no reports are made which are open to inspection; the checks upon mal-administration were not evident to us.

The whole establishment was an exaggeration of the relief which must be administered to individuals of the class who are recipients of charity. The arrangements for the physical comfort of the children were in every respect so superior to those enjoyed by children of the class of society in which their parents had moved, that it was evident no barrier whatsoever was erected against the dependence of the entire class of orphan children in this or in some of the other orphan houses of the town, and that no limit but the exhaustion of the funds, or the maintenance of all orphans, could confine this all-comprehensive scheme. In such establishments it appears essential to keep in view the necessity of administering the relief afforded to the indigent classes in such a manner that the natural sympathies of relatives and friends may not be numbed, and that the more healthful agencies which arise from the independent exertion of individual benevolence may exert their invigorating influence in society. Charity, which invites all and excludes none, discriminating with little or no care between the really indigent and those who have only need of the exercise of greater industry and economy, enervates those whom it is intended to benefit.

The relief afforded to orphan children should embrace a provision for their physical wants, and for their moral and religious training and secular instruction; but it is equally unjust and imprudent to raise the physical condition of such children, supported by public charity, greatly above that of the children of the same class of society who are supported by the unaided industry of their parents. The quality of the relief afforded to their merely physical necessities ought to be such as to create a preference in the minds of their friends and relatives for the exercise of their own sympathies, rather than a dependence on the bounty of society. With this view, the regulations of such establishments should prescribe that the dress and diet of the children should not be superior in quantity or in quality to that obtainable by a labourer for his family. The children of working-men in Amsterdam, and in Holland generally, chiefly eat rye bread, potatoes, oatmeal, and milk. The children of the orphan houses have the best wheaten bread, meat, butter, eggs, &c., and in quantities greatly exceeding those of the coarser diet which can be afforded by the self-supported labourer.

Some other restrictions may also be necessary to create and maintain a preference for home training. Such establishments

should not be situated in the centre of cities, but at the distance of a few miles, like the nurseries of London. When they are created for agricultural districts, many advantages would be derived from having only one establishment for a considerable area.

Great care should also be taken, that the means adopted in the industrial training of children in such establishments do not interfere with the success of self-supported labourers, and that the expedients adopted to procure them situations in service do not displace the children of the industrious from employment and diminish their chances of self-support.

But though these expedients may be legitimately adopted, to create a preference in the minds of the children and in the minds of their relatives for the training of an orphan under the roof of a relative, such expedients cannot be employed in the department of religious instruction, or of moral and industrial training, nor in the means adopted for imparting such an amount of secular knowledge, and conveying such an acquaintance with their social duties, as may enable the children to become useful and respectable members of their class in society. Religious instruction and moral and industrial training cannot be rendered meagre in order to prevent the undue reliance of this class of claimants on the public funds, or on the public sympathies; but on the contrary, the standard to be followed in conveying religious knowledge to orphans, and in regulating their moral training, is not certainly to be found in the great majority of the cottages of the industrious classes, among whom it is to be feared the examples of skill and success in these departments of education are rare. We may hope to receive some hints for our guidance from the care which the best instructed artisans bestow on the industrial education of their children; but in the department of secular knowledge, we are to be led by clearer lights to do that which we may deem most expedient to render the children hardy, industrious, and intelligent members of the working classes.

In none of these departments can we render the means adopted to instruct and elevate the children meagre, because they may happen at present to be meagre among the poor; we must depend on other circumstances attending their position for the action of a healthful stimulus on the minds of their relatives, creating and sustaining natural sympathies, and the exertions which spring from them.

III.

THE SYSTEM OF COMPULSORY APPRENTICESHIP PURSUED IN THE INCORPORATED HUNDREDS OF SUFFOLK AND NORFOLK.

By JAMES PHILLIPS KAY, Esq., M.D., Assistant Poor Law Commissioner, and Secretary to the Committee of Council on Education.

THE system of compulsory apprenticeship was one of the peculiar features of these Incorporations; the directors and acting guardians having authority to compel poor persons to suffer their children to be apprenticed, and to constrain the occupiers within the limits of the Hundred to receive the children allotted to them, or to contribute towards the charge of apprenticing the children out of the Hundred by fines or otherwise.

The powers conferred by the local Acts of these Incorporations upon the directors and acting guardians, relative to the apprenticeship of poor children, deserve particular comment.

How ample the powers conferred on the directors and acting guardians for this purpose were, will appear from the perusal of the 21st section of the Act 39 Geo. III. 1799, for the better and more effectual relief and employment of the poor in the hundred of Samford, in the county of Suffolk:—

"And be it further enacted, that it shall and may be lawful for the said directors and acting guardians present, at any quarterly or weekly meeting, to let or place out for one year any of the poor children maintained in the said house; and for them, the said directors and acting guardians, present at any such quarterly or weekly meeting, or for the clerk for the time being of the said directors and acting guardians, at any time or times, being thereunto duly authorized by an order of the said directors and acting guardians present at any such quarterly or weekly meeting, with the consent of any two justices of the peace for the said county, to bind by indenture, under the common seal of the said corporation, any such poor children, as also any poor children belonging to any parish within the said hundred, whose parents the said directors and acting guardians shall judge not able to maintain them, to be apprentices for any term not less than three years nor more than seven years (except where the child, being a male, shall be above the age of 18 years, or being a female, above the age of 15 years, at the time of such binding, and no such child shall in any case be bound or continue an apprentice after the age of 21, being a

male, or after the age of 18, being a female) to any person or persons occupying lands or tenements, or using any trade in any parish, hamlet, or place, within the said hundred, whom the said directors and acting guardians shall think proper persons to take apprentices (whether such person or persons be resident within the said hundred or elsewhere), due regard being had to apportion the number of children which shall be bound apprentices, according to the annual sum at which the persons to whom they are hereby directed to be bound shall respectively be assessed by a pound rate to the relief of the poor in any parish within the said hundred; or (with the like consent) to bind any such children apprentices to the governor of the said house and his successors in such office, or to any other proper person willing to take such apprentices, or to bind any such male children apprentices to any captain, master, or owner of any ship or vessel in the sea service willing to take such apprentices, in like manner as churchwardens and overseers of the poor, with the assent of two justices of the peace, are by the laws now in being empowered to bind poor children whose parents are not able to maintain them, to be apprentices; and the persons to whom such children shall, by the said directors and acting guardians (with such consent of two justices of the peace as aforesaid) be appointed to be bound apprentices, shall be obliged to receive and provide for such apprentices, and to execute a counter part of the indentures of apprenticeship, in like manner, and under the like penalties as persons are now obliged by the laws in being to provide for apprentices appointed to be bound by churchwardens and overseers of the poor, with the assent of two justices of the peace; and no apprentice so bound as aforesaid shall (except with the consent of the directors and acting guardians, under their common seal) be assigned or turned over to any other person whomsoever; and all persons to whom such apprentices shall be assigned or turned over shall be obliged to receive and provide for them, and to execute a counterpart of the assignment, in like manner as the persons to whom they were first bound as aforesaid were obliged to receive and provide for them, and to execute a counterpart of the original indentures of apprenticeship; and in like manner the persons to whom such children shall be let or placed out for one year as aforesaid, shall be obliged to receive and provide for such children in like manner and under the like penalties as they are now obliged by law to provide for apprentices appointed to be bound by churchwardens and overseers, with the assent of two justices of the peace; and no such child or children so let out or placed out for one year shall (except with the consent of the directors and acting guardians at some quarterly or weekly meeting) be assigned or turned over to any other person whomsoever; and all persons to whom any such child or children shall be so assigned or turned over shall be obliged to receive and provide for them in the same manner, and under the same penalties, as the persons to whom such children were first let or placed out were obliged to receive and provide for them."

The plans adopted in the several Incorporated Hundreds differed in various respects as to the mode of allotting the children to the occupiers, the rule by which they were distributed, the fine paid for refusal to receive an apprentice, the period of apprenticeship, the permission to assign children to succeeding tenants, the payment or nonpayment of premiums with apprentices, the provision of clothing, &c., the means adopted to procure the performance of the duties of master and apprentice respectively, the apprenticeship of children out of the Hundreds, the means by which the moneys for the payment of premiums and expenses for apprenticing

children without the Hundreds were obtained, the period which children were required to be maintained in the Hundred-house before they were apprenticed, and their age, and in other matters of less consequence.

If it were desirable to lay before the Commissioners a complete account of the system of apprenticeship, the course adopted by each of the Hundreds would deserve to be compared upon each of these points of difference. In the limits assigned to this Report, I propose chiefly to examine the efficacy of the means adopted to procure an equal distribution of the burthen upon the rate-payers, and to inquire whether the system of compulsory apprenticeship can be usefully employed as an expedient for removing the pauperism and dependence of the poorer classes.

The plans pursued in order to accomplish an equal distribution of the burthen of compulsory apprenticeship upon the rate-payers were various, and exhibit how great are the difficulties attending the effort, and how frequently these plans issued in the reproduction, in some other form, of the same evil of an unequal pressure. Without descending into the minutest details, it may be desirable to classify the courses pursued as nearly as possible under various heads, and to illustrate the consequences of the plans adopted by each class while comparing it with the rest.

The scale-allowance system being the mode of out-door relief adopted in the several Incorporations, and the Hundred-house being employed as a house of reception, the number of children to be apprenticed was usually determined in one of two ways.

First, The parish officers presented an annual report to the directors and acting guardians of the names of the children in their respective parishes, who were of an age to be apprenticed and for whom their parents had not found work: or,

Secondly, The parents who alleged they were unable to support or find work for their children, sent them into the workhouse, where they were required to reside a certain period, varying from three months to a year, before they were apprenticed. The directors and acting guardians once in every year proceeded to allot to the occupiers the children born and bred in the house who had attained the required age, and such other children as appeared on the apprentice list, by either of the modes described. 1. The apprentices were distributed by an unrestrained annual ballot. The Hundred or parish neglected to keep a register of the apprentices distributed, and they were balloted without reference to the amount of the assessment or to the number allotted in previous years, but the person upon whom the burthen fell was simply selected by lot.

This was the practice in the Hundred of Stow, as is stated in the following evidence of Mr. Hart and Mr. Webb, directors of that Incorporation.

"The names of the children to be apprenticed in the Hundred of Stow were sent in by the parishes, in order that they might be balloted at the quarterly meeting. The number of children allotted to each occupier was not generally made proportionate to the assessments; a person having a 10*l.* assessment might have as many children allotted as a person assessed at 100*l.* This circumstance occasioned considerable dissatisfaction among the smaller occupiers, who justly complained of the inequality of the burthen. There were great if not insuperable difficulties in distributing the burthen equally. A person having an assessment of 200*l.* or 300*l.* could not be expected to take two or three apprentices at once, and the imposition of an apprentice was often an extreme inconvenience to a person having a small assessment. The smaller occupiers having no employment for the apprentices, were generally compelled to transfer them, and pay a premium to the person who took them. The vigilance of the magistrates did not always prevent the children being transferred to improper persons.

(Signed) "JOHN GEORGE HART."

"Will you describe the system of apprenticeship in the Hundred of Stow?—Children were sent into the house by their parents, in order that they might be apprenticed with those who were more permanently in the house. A list of these children was annually sent to the parishes, that they might be allotted to the occupiers. This allotment was regulated by the names of the persons considered liable to take apprentices being sent to the house by the parishes, and the children being there distributed by ballot. In the parish of Combs a list of the apprentices allotted from year to year was kept of late years, but formerly no such account was preserved. The allotments therefore had been exceedingly unequal, and the smaller occupiers complained of the system as a grievous nuisance. It was certainly very unjust to the smaller occupiers. I remember an apprentice being sent to a man some years ago whose rate was not above 3*l.*

"What was the effect of this system on the children?—The children in our Hundred were apprenticed for twelve months. No respectable person was willing to receive one of those brought up in the house, because their morals generally were so bad that they endangered the morals of the children of families, and because they could not be trusted, and were in every respect useless. The practice, therefore, was to pay a sum of money to get rid of them to some one else; and you may very well suppose that people were not very nice where they put them; 5*l.* were frequently paid for this transfer. They then got into the hands of small occupiers, who did what they liked with them.

"Did these children generally turn out well?—I know many instances in which they did not.

"When children are apprenticed in towns, what do you think becomes of them?—I think it would be very remarkable if the females, particularly, became respectable characters. The system is altogether bad; but that practice was not much countenanced in our Hundred. In the parish of Combs, of late years, great efforts were made to reduce the irregularity of the burthen, and the better distribution of the apprentices lessened the dissatisfaction. We were accustomed to give a premium with the children during the first, second, and third years, the premium being less in each successive year.

(Signed) "JOS. A. WEBB."

In the Hundred of Forehoe the parish officers deliver to the directors and guardians a list of all children resident in their respective parishes whose age is between twelve and thirteen, and

who are fit for service, and also a list of the occupiers liable to take apprentices. The children are then allotted at a vestry meeting by ballot, the names of the occupiers standing highest on the list being written on tickets, and deposited in one basin, the names of the children in another, and the names of the occupier and child drawn. Only one child is distributed to one occupier, and an occupier taking a child one year is not liable the succeeding year; but the number of children apprenticed is not distributed according to the assessment, each occupier assessed at £10 being deemed liable to take one in his turn, and persons assessed at £6 have been obliged to accept apprentices. The children are apprenticed until the Michaelmas after they are seventeen. In the parish of East Dereham the children were distributed at a vestry meeting by ballot, without any proportion being observed in the numbers allotted according to the assessment.

In the Incorporated Hundreds of Bosmere and Claydon, Colneis and Carlford, and Blything, Suffolk, the apprentices were allotted in numbers proportioned to the assessments, beginning with the larger occupiers, and descending to the smaller. In the Loddon and Clavering hundreds all the smaller occupiers were compelled to receive one apprentice before the large occupiers took a second. In some of these Hundreds the larger occupier received a certain number of apprentices on account of his assessment, then the person whose assessment was next in amount, and so on, till the children were apprenticed to the smallest rate-payer, when the largest occupier was again liable to receive the number apportioned to his assessment. In this class the plan adopted in the Blything Hundred appears to have been the most elaborate, and to have a greater appearance of justice in it than that adopted by the others. The apprentices being numbered 1, 2, 3, 4, &c., the following was the rule by which they were successively allotted to the different occupiers, as respects the order and the proportion in which the burthen was distributed.

"Apprentices shall be allotted at the annual, and bound at the Michaelmas quarterly meetings, and allotted according to the following rules of progression:

" Every person occupying—

£300 per annum,	who has	six,	1.	3.	6.	10.	15.	21.
250	ditto	. five,	2.	5.	9.	14.	20.	
200	ditto	.four,	4.	8.	13.	19.		
150	ditto	three,	7.	12.	18.'			
100	ditto	. two,	11.	17.				
50	ditto	. one,	16.					

And that all occupiers of lands and tenements between any two of the above classes shall take an apprentice before the occupier of the inferior of such two classes. That then all occupiers under 50*l.* per annum down to 10*l.*, liable to take apprentices, shall take one each according to the amount of their occupations, beginning with the highest. That in all cases where more than one child is to be apprenticed to any parish, the

oldest child shall be first allotted, and so on to the youngest, unless their appointed masters shall otherwise agree about the appointment of them. That two girls shall not be apprenticed in succession to the same person immediately following each other, if it be possible to order the appointment otherwise."*

If all the occupiers had remained stationary, a nearer approach to an equal distribution of the burthen would have been obtained by this system, than by the preceding; but as in some parishes the large occupations were held for short periods only, and the new occupant was considered liable to receive the number of apprentices apportioned to his assessment immediately on his arrival, whether the smaller occupations had received their share or not, the burthen, in such parishes, was entirely thrown on the large occupiers. In other parishes the large occupiers held their farms so long, that the liability to receive an apprentice descended through every grade of the scale, until every rate-payer assessed at 10*l.* had been compelled to take an apprentice. In such parishes the inconvenience was more severely felt by one rate-payer than another, inasmuch as the trade of one rate-payer afforded means of employing the child, whereas, in many instances, no such means existed, and then the imposition of the apprentice simply occasioned the exaction of a fine of 10*l.*, a penalty which was a cruel hardship to many industrious rate-payers of small means, struggling against adverse circumstances. Even where apprentices could be received, no equality in the pressure of such a burthen could be obtained, by apportioning the numbers allotted according to the assessments. The extent of the inconvenience could not be determined by such a rule, but would be increased or diminished by the circumstances of the family, the wants of their business or trade, and many other domestic matters, too various to be appreciable by any single test, or capable of being collected in such a way as to form a perfect scale by which the equal pressure of this tax might be insured.

The following is the evidence of Mr. Foreman, of Halesworth, on this subject:—

"I was closely connected with the Incorporation of the Hundred of Blything for 20 years, having acted as assistant to Mr. White, the clerk of that Hundred, during the whole of that period. I have therefore had sufficient opportunities of witnessing the effects of the apprentice system, which was pursued in that Incorporation. The practice was to allot the children annually to the occupiers in the several parishes, in proportion to their assessments, beginning with the largest occupier, and descending to those assessed for smaller sums. When the largest occupier had taken a number of children usually allotted to an assessment of that amount, they were sent to others in succession. Sometimes three children were forced upon a large occupier at one binding. I have frequently known two bound at the same time to one occupier. They were bound between the ages of 13 and 15, and were always apprenticed until they were 18.

* Taken from the bye-laws of Wangford Hundred, where the regulations in this respect resembled the Blything.

"The average term was about four years. In some parishes, as the parish of Blythburgh, for example, this burthen fell altogether on the larger occupiers. The occupations in this parish are large, and the assessments are therefore high. As soon as a farmer had taken an occupation, he became liable to receive apprentices to the full extent of his assessment, and he seldom worked out his number before his lease expired. His successor was subject to a renewal of the same burthen, and thus the apprentices were almost, if not altogether, allotted to the large occupiers in such a parish. Even in the cases of the largest occupiers the services of the children were frequently not wanted. I have known frequent appeals to the board of directors and acting guardians from such occupiers, and the fines were often paid rather than the children should be allotted. In the other parishes where the large occupiers have retained their farms for several successive years, their liabilities have been exhausted, and the burthen has rapidly descended to the smaller occupiers. I have known small rate-payers put to the greatest inconvenience, by having the apprentices forced upon them when they had no need of their services, and were too poor to pay the fine.

"In such cases the children were allotted, whether it was possible to receive them or not. They were allowed to be transferred, a premium varying from 5*l.* to 10*l.* being generally paid. I have known as much as 15*l.* paid."

In order to diminish the amount of injustice thus inflicted, the system was in the Wangford Hundred further elaborated. The scale of the order of succession, and number of children distributed according to the assessment, resembled that adopted in the Blything Hundred, but premiums varying with the amount of assessment were given with each apprentice. Thus, with an apprentice allotted in respect of an assessment of

£50 and upwards	. . .	£5	5	0	premium was paid.
40 and under 50	. . .	6	0	0	
30 and under 40	. . .	8	0	0	
20 and under 30	. . .	10	0	0	
15 and under 20	. . .	11	0	0	
10 and under 15	. . .	15	0	0	

The whole or part of these premiums was given, as appeared reasonable, on account of the length of service required of each child. The penalties paid by the occupier for refusing to receive apprentices were also proportioned to the assessment in respect of which the apprentices had been allotted.

For every apprentice allotted in respect of an assessment of

£50 and upwards	. . .	£10	0	0	fine was paid.
40 and under 50	. . .	9	0	0	,,
30 and under 40	. . .	7	0	0	,,
20 and under 30	. . .	5	0	0	,,
15 and under 20	. . .	3	10	0	,,
12 and under 15	. . .	2	10	0	,,
10 and under 12	. . .	2	0	0	,,

The elaboration of this rule proves how grossly unjust was the rule adopted in other Hundreds to regulate the compulsory allotment of children; and it is evident that, as far as the equal distribution of the pecuniary burthen was concerned, a nearer approach

to equality was obtained. The remaining slighter faults in the adjustment of the burthen were submitted to with satisfaction, in comparison with the system adopted elsewhere. In this Hundred in-coming tenants were also allowed to take the apprentices of the preceding occupier by assignment, in default of which arrangement they were liable to a new allotment of children. That this system failed to give universal satisfaction may be inferred, because the allotment of children in the Wangford Hundred ceased to be compulsory in 1834. Larger premiums were thereafter paid to such persons as took apprentices, and the payment of the premium took place by instalments diffused over the period of apprenticeship. Soon after it ceased to be compulsory, the apprentice system fell almost into disuse in this Hundred.

Various other systems equally elaborate were adopted in other parishes, as in the parish of Aylsham, for example, and in some Incorporations, owing to the influence of local circumstances, particularly of the mode of taking the averages, as in the Hundreds of Tunstead and Happing; but it might easily be shown how each of these failed to attain an equal distribution of the burthen.

The following evidence of Mr. Runting, master of Shipmeadow workhouse, Wangford Union, displays the oppression of small occupiers practised under the ordinary system, and the comparative advantages obtained by the adoption of the two graduated scales of premiums and penalties adopted in this Hundred:—

"I have always found the system of compulsory apprenticeship to be oppressive to the occupiers, and especially to the small ones, because the occupiers assessed at 50*l*. and upwards could in general well pay the penalty of 10*l*. for refusing to take the apprentice, and thereby cause the allotment to fall upon the small occupiers, who, although the assessment might be only 12*l*. or 15*l*., were obliged to take the apprentice or pay the penalty of 10*l*., the same as those assessed at 50*l*. and upwards, which you will see by the bye-laws, a copy of which I now hand you; but when the regulations for allotting the children to be bound out as apprentices was altered in 1832, by which the occupiers assessed at 50*l*. received a less premium and paid a higher penalty than the occupier assessed at 12*l*. or 15*l*., it gave, I think, almost general satisfaction, because the system was founded upon the principle of equity. But I can state from my own experience, that the principle of compulsory apprenticeship is injurious not only to the occupiers, but also to the poor, as I have for some years always found the parents extremely anxious to send their children into the house to be bound out; and as the children come into the house for that purpose at Lady-day, and were allotted at June, and not sent to their places until September, many of them, during six months, contracted such a liking for the house that they became complete paupers in their minds and principles; and I have had many of them come direct from their places, at the expiration of their time, into the house as paupers; and those that have done so have not often turned out well; but I am glad to be able to state this has not been a universal rule, as many of them have made very good servants. I beg to hand you the following two cases of compulsory apprenticeship.

"Case of Mr. Richard Bucket, St. Lawrence.—In 1830, Mr. Bucket stood on the books assessed at 28*l*., and Hannah Moore was allotted to him, with a penalty of 10*l*. if he refused to take her. She was by no means a good girl at the time of the allotment. Mr. Richard Bucket at the same time had six small children, and himself and wife were obliged to work hard on the land to support them. Mr. Bucket at first refused to take the apprentice, and I was obliged to apply to the magistrates to enforce the penalty; but he afterwards accepted the apprentice; she did not conduct herself well, and ran away several times, and was brought to me in a state of destitution. By order of the committee, I applied to the magistrates, and summoned him to appear to show cause why he did not support his apprentice; when the magistrate ordered him to go out and purchase about forty shillings' worth of clothing, while I remained in their room with the girl, and to pay the penalty of 10*l*., and for me to receive the girl into the house. Mr. Bucket borrowed the money and paid me, since which time I have often had the above girl in the house as a pauper; and not long ago the same girl was put to bed in the house with a base child.

"Case of Mr. B———, of Worlingham.—In 1831, Mr. B——— stood on the committee-books assessed at 25*l*. 15*s*., and H. Ellett was allotted to him, with a penalty of 10*l*. if he refused to take the apprentice: which at first he did, and several times called on me and the late Mr. W. Bobbitt to try to get off the allotment. When he found he could not, he wished me to purchase a horse of him, to enable him to pay the penalty; which as I declined doing, he agreed to take the boy, and the indentures were signed. The father of this boy sent him and another son into the house for the purpose of being bound out at the same time; which second son was allotted to another occupier. I have often been told that the father of the above boys used to win or lose large sums of money at cards about the time the boys were in the house: but to my own knowledge, soon after the boys were bound out, he hired a public house in Beccles, where I believe he now lives; at least he did not many months since, as I was in his house and spoke to him respecting the boys."

"I think the above two cases will be quite sufficient, without any others, to show the effects of compulsory apprenticeship."

The amount of the assessment was not a rule by which the extent of the means which the rate-payer possessed, of providing for the lodging, maintenance, clothing, and education of children in a useful trade or calling, could be determined. Not only, therefore, in the most regular operation of such a rule was there occasioned some inequality in the pressure of the burthen, but this mode of allotting the children was not calculated to produce the result proposed to be accomplished by the system, since the children were allotted to rate-payers, whether able to lodge, maintain or clothe them with comfort or not, and whether they had the means of employing the children or not; in other words, without any regard to the object which it was alleged the directors and acting guardians had in view, viz., the instruction of the children in a useful trade or calling.

Thus a large occupier might be forced to receive those apprentices at once whose services he did not need, and a smaller occupier would sustain a greater inconvenience with the allotment of one apprentice, and in both cases the proposed education of the children would not be procured.

The pauper apprentices, moreover, not unfrequently displaced servants supporting themselves by the wages of their labour, without having recourse to the parish.

This interference with the independent labourer allies the plan closely to the allowance system.

Evidence of Mr. Atmer:—

"I keep the Angel Inn, Halesworth. I had not been three months in this inn before an apprentice was allotted to me from Bulcamp-house. I had no need of her services, and I was obliged to discharge a good maid-servant to take her in, which I very reluctantly did. I had a great deal of trouble with this girl; I had frequently to apply to the parish officers on account of her insolent behaviour; she was slovenly and disobedient. When I reproved her, she answered, 'You are obliged to keep me, and I shall do as I please.' When her apprenticeship had terminated, I did not keep her any longer, and I would rather pay 10*l.* than take another. I considered it very unjust and very hard to have a child forced upon me in this way.

"As witness my hand this 10th day of June,

"William Atmer."

Mr. Bray moreover gives evidence that the parents removed their children from service, in order that they might transfer the responsibility of providing for them to the Incorporation.

The practice of apprenticing children out of the Hundreds chiefly prevailed in the Samford, Colneis and Carlford, and Bosmere and Claydon Hundreds, Suffolk, and the Forehoe Hundred, Norfolk, and slightly in the Wangford Hundred, Suffolk. In the Colneis and Carlford, Bosmere and Claydon, and Wangford Hundreds, if the occupier to whom the child was first allotted refused to receive him, a fine of 10*l.* was inflicted. The apprentice was then offered with the fine as a premium to a second occupier, and if he refused, a second fine was levied. The 20*l.* thus accumulated were used as a premium to apprentice the child out of the Hundreds in the Colneis and Carlford, and Bosmere and Claydon Hundreds. In the Wangford the apprentice was offered a third time to the occupiers, with the accumulated fines, then amounting to 20*l.*, and if a third time refused, was then apprenticed out of the Hundreds, the accumulated fine being employed to pay the premium and defray the costs. In the Forehoe Hundred this was attempted after the application had been once refused. The practice pursued in the Samford Hundred is thus described by Mr. Catchpole, the governor of Tattingstone workhouse, whose skill and activity in the performance of his duties have been such, as to derive from the system whatever advantage it could afford.

"I have been governor of Taddingstone workhouse seventeen years. The system of allotting the children to the occupiers in the Hundred of Samford has ceased ten or twelve years. That system gave extreme dissatisfaction to the occupiers; I should say that the children were refused by the occupiers, fines being paid for twelve out of twenty of the children

offered, and the Hundred still burthened with their maintenance in the workhouse. The occupiers were still liable to have the children allotted in the following years; and when I came I found girls in the house who had been allotted three years in succession, and refused. In the first year after I came twenty-seven children were allotted, of whom sixteen were refused, and the fine of 10*l.* paid on each. After a few years the system of allotting the children ceased, and then we commonly apprenticed them out of the Hundreds, or sent the girls out as servants, but the major part were apprenticed. We generally paid a premium of 10*l.* with girls, and from 10*l.* to 15*l.* with boys. Besides the premium, there were, of course, other expenses on account of indentures and travelling, &c. Half the premium was customarily contributed by the parish, the other half by the Hundred. The advantage obtained was that the children ceased to be chargeable to the Hundred. Up to the last year or two the numbers of children thus apprenticed out of the Hundreds had gradually increased, and, unless arrested by some order, my impression is that the numbers would continue about the same. Of these children several have been apprenticed in Ipswich, Colchester, London, Manningtree, Harwich, and elsewhere. I have deemed it my duty to make such inquiries concerning the apprentices as my other numerous duties as governor in the Samford hundred would permit me to do.

"As witness my hand, this 8th day of June, 1836,

"WM. CATCHPOLE."

The extent to which the different systems were pursued in several of the Incorporated Hundreds will appear from the following Returns made to me from the governors of the respective Hundred-houses of industry:—

STOW HUNDRED.

The number of children allotted to occupiers in the following years:

Year	Number	Year	Number
1826	6	1831	49
1827	6	1832	67
1828	12	1833	59
1829	40	1834	35
1830	26		

LONDON and CLAVERING HUNDREDS.

	Number of Apprentices.	Fines Paid for refusing to receive them.			Number Apprenticed out of Hundreds.	Sums Paid as Premiums.			
		£.	s.	d.		£.	s.	d.	
1821	24	10	0	0	1	75	12	0	Average 3 guineas each.
1822	28	10	0	0	.	88	4	0	
1823	37	0	0	0	2	116	11	0	
1824	34	10	0	0	3	107	2	0	
1825	22	0	0	0	.	69	6	0	
1826	20	0	0	0	2	63	0	0	
1827	25	0	0	0	1	78	15	0	
1828	20	10	0	0	1	63	0	0	
1829	25	10	0	0	.	78	15	0	
1830	24	0	0	0	1	75	12	0	
1831	34	0	0	0	1	107	2	0	
1832	42	0	0	0	2	132	6	0	
1833	27	0	0	0	1	85	1	0	2 guineas.
1834	32	0	0	0	.	67	4	0	
1835	50	0	0	0	5	105	0	0	

Bosmere and Claydon Hundreds.

	Money Paid as Fines.			Children Bound in the Hundred.	Bound out.	Total.
	Occupiers.	Parishes.	Total.			
	£. s. d.	£. s. d.	£. s. d.			
1821	70 0 0	40 0 0	110 0 0	38	2	40
1822	30 0 0	80 0 0	110 0 0	29	1	30
1823	110 0 0	50 0 0	160 0 0	18	1	19
1824	50 0 0	20 0 0	70 0 0	16	5	21
1825	30 0 0	60 0 0	90 0 0	14	3	17
1826	30 0 0	20 0 0	50 0 0	10	5	15
1827	70 0 0	20 0 0	90 0 0	15	2	17
1828	70 0 0	100 0 0	170 0 0	11	5	16
1829	50 0 0	40 0 0	90 0 0	6	0	6
1830	60 0 0	40 0 0	100 0 0	22	5	27
1831	20 0 0	40 0 0	60 0 0	13	2	15
1832	60 0 0	130 0 0	190 0 0	7	3	10
1833	0 0 0	70 0 0	70 0 0	17	4	21
1834	0 0 0	60 0 0	60 0 0	11	1	12
1835	10 0 0	0 0 0	10 0 0	1	0	1

Wangford Hundred.

	Number of Children Bound.	Premiums Given.	Penalties Paid.
		£. s. d.	£. s. d.
1824	85	320 0 0	230 0 0
1825	63	340 0 0	220 0 0
1826	73	340 0 0	230 0 0
1827	74	360 0 0	260 0 0
1828	74	350 0 0	230 0 0
1829	45	210 0 0	160 0 0
1830	70	. . .	200 0 0
1831	93	. . .	340 0 0
1832	59	379 15 0	313 10 0
	636	2,299 15 0	2,183 10 0

Colneis and Carlford Hundreds.

	Apprentices Bound in the Hundreds.	Amount of Fines Paid.	Apprentices Bound out of the Hundreds.	Premium Given.
		£. s. d.		£. s. d.
1821	75	230 0 0	2	30 0 0
1822	70	170 0 0	2	23 0 0
1823	59	140 0 0	7	95 16 0
1824	47	120 0 0	0	0 0 0
1825	30	100 0 0	4	55 0 0
1826	38	90 0 0	3	45 0 0
1827	44	70 0 0	9	103 10 0
1828	27	70 0 0	2	24 0 0
1829	41	200 0 0	1	16 0 0
1830	41	170 0 0	6	79 0 0
1831	50	250 0 0	10	137 0 0
1832	21	70 0 0	3	38 0 0
1833	23	110 0 0	1	10 0 0
1834	21	40 0 0	2	22 0 0

Blything Hundred.

	Fines Paid.	Amount.			Number Bound from House.	From Parishes by Magistrates.
		£.	s.	d.		
1821	2	20	0	0	25	..
1822	4	40	0	0	42	..
1823	0	0	0	0	47	..
1824	2	40	0	0	19	..
1825	3	30	0	0	58	..
1826	0	0	0	0	31	..
1827	2	20	0	0	25	..
1828	0	0	0	0	14	..
1829	0	0	0	0	22	..
1830	5	50	0	0	41	20
1831	13	130	0	0	67	13
1832	14	140	0	0	72	20
1833 {	12	120	0	0	85	17
	1	5	16	6	..	..
1834	15	150	0	0	62	12
1835	8	80	0	0	20	..

Samford Hundred.

	Bound into large Towns out of the Hundred.	Number of Years for all.	Premiums therewith.			Bound into rural Districts out of the Hundred.	Number of Years.	Premiums.		
			£.	s.	d.			£.	s.	d.
1820	7	27	63	0	0	3	20	15	0	0
1821	9	37	90	0	0	4	16	30	0	0
1822	10	38	92	0	0	7	35	45	0	0
1823	23	101	281	0	0	7	26	67	0	0
1824	28	124	278	0	0	12	59	123	0	0
1825	32	156	375	0	0	5	26	65	0	0
1826	22	123	222	0	0	5	32	58	0	0
1827	24	105	259	0	0	6	30	57	0	0
1828	21	108	234	0	0	7	39	76	0	0
1829	44	234	476	0	0	13	87	132	0	0
1830	23	119	256	0	0	8	58	94	0	0
1831	22	108	229	0	0	4	26	44	0	0
1832	34	152	383	0	0	4	18	42	0	0
1833	19	99	201	0	0	3	19	41	0	0
1834	13	72	162	0	0	..	..	..		
1835	15	78	164	0	0	7	43	55	0	0

346 bound in large towns.
95 — — rural districts, out of hundred.
And 59 — within the hundred.

In all 500 averaging 33⅓ yearly.

[Amount

SAMFORD HUNDRED—*continued.*

	£.	s.	d.	£.	s.	d.
Amount of premiums paid into large towns				3,763	0	0
Annual average	250	17	4			
Average to each apprentice	10	17	6			
Amount of premiums paid in rural districts out of hundred .				944	0	0
Annual averages	62	18	8			
Average to each apprentice	9	18	9			
Amount of premiums paid out of hundred, the annual average	313	16	9	4,707	0	0
Average number bound annually out of hundred						
Into large towns . . .	$23\frac{1}{3}$					
— rural districts. . .	$6\frac{1}{4}$					

By a natural coincidence, the labour-rate and the system of compulsory apprenticeship were both recognised in the Hundreds of Samford and Forehoe. The principle of the labour-rate involves the assumption of the responsibility of providing labour for the poor, and renders it therefore unnecessary that they should endeavour to discover, deserve and retain it themselves. The system of a compulsory allotment of apprentices has a parallel tendency. The Incorporation assumes the responsibility to provide food, clothing, lodging, and education in some useful trade for the children of the poor, and thus weakens, if it does not sever, the bonds which naturally bind together the members of families, the affection with which the parent is stimulated to provide for his children, and the filial gratitude and duty which enclose the child receiving these benefits. When the Incorporation discharges the parental office, the father ceases to do so, and the child is to this extent separated from his parent, that, as the father has ceased to perform his natural duties, the child is weaned from his natural affections. The source whence the provision for his present and future wants flows is an abstraction which awakens no regard; he is rendered an orphan before his time by the unnatural interference of the law.

The evil is not confined within this limit up n either side.

In a district where it is usual for an Incorporation for the relief of the poor to assume the duty of providing for the apprenticeship of the children of the poor, the responsibilities attending marriage are lessened, and it is degraded. Among the poor, at least equally with the more wealthy; the duty of providing for their offspring ought to call forth new exertions and hopes, all tending to promote a virtuous and healthful tone of mind. To transfer these responsibilities to the Incorporation is to render marriage merely the means of gratifying an instinct. The man and wife in such a district become the parents of pauper apprentices.

In proportion as marriages are instinctive and not reasonable, they are premature and improvident. When they are thus the

results of any wayward impulse rather than the consequences of reflection, applied to the removal of those obstructions which create time for the exercise of prudence, they are seldom happy.

As the parents ripen in age in such a district, they find their children are all gone ere they are aware. One is in the workhouse, apprenticed to the governor; another is in the county town, apprenticed to a milliner; another is at sea, apprenticed to the captain of a West Indian ship; a fourth is perhaps apprenticed to the publican of a neighbouring village. This method of providing for the instruction and training of the children of the poor is not natural, and I deem it to be injurious.

The place of the parent cannot be wholly supplied by the master of the apprentice. Instruction in his trade and calling he has a right to expect, and in well-managed apprenticeships it will be the interest of the master to afford this education to the child. But moral training, which is a parent's peculiar duty, forms no part of the acknowledged function of the apprentice's master. The general apprenticeship of the children of the poor could only be justified on two grounds, one that the parents of poor children were so utterly unfit to be entrusted with the care of their children as to require the interference of the state; and secondly, that the persons to whom they were entrusted were not only capable and willing, but did practically train the children in such a way as to fit them for the performance of their social duties.

Does experience show this to be the result of the compulsory apprenticeship of the children of the poor?

When the child is removed from his father's cottage to be apprenticed, all his wants are in future supplied by the Incorporation. He derives nothing from his parents—he seems to owe them nothing. The Incorporation fills the place of the parent in every respect excepting in this, that there is nothing in the Incorporation which procures a tribute of gratitude from the child. The apprentice owes his parish no duty nor respect—he pays it none; on the contrary, the pauper apprentice, like the pauper, hates his parish and his parish master, and consequently becomes a nuisance rather than an advantage to his employer.

The effects of such a system on the children are attested by the following memorial from the principal owners and occupiers of the parish of Walton, in the Hundred of Colneis:—

"To the Directors and acting Guardians of the Hundreds of Colneis and Carlford.

"We, the undersigned, being the principal owners and occupiers of lands and premises liable to take parish apprentices in the parish of Walton, in the Hundred of Colneis, do earnestly and respectfully request the directors and guardians will not send any more parish apprentices to any of the owners and occupiers in the said parish, as from the great inconvenience and nuisance we have experienced for so many years from taking such apprentices, we are fully determined not to take any more;

therefore, under such circumstances, we are of opinion, to send more would have the effect (as it has before) of taking 20*l.* from some of us; and, after having paid such forfeits, the intended apprentice will still be in the Hundred-house at Nacton, at the charge of the parish of Walton aforesaid.

"Charles Collett.	Henry Wilkin.
"William Fulcher.	Benjamin Green.
"William Page.	Staunton Julian.
"William Boby.	Thomas Woodgate.
"Abraham Abbott.	Joseph Brigg."
"James Pipe.	

When the apprentices were bound out of the Hundreds, their misfortunes were generally increased. The premiums offered with the children proved an irresistible temptation to needy persons to apply for an apprentice at the Hundred-house, whether they wanted the services of the apprentice or not, or whether they could instruct him in any useful calling or not. Their sole object often was to secure the premium. Ten pounds or twenty pounds were wanted to pay a pressing demand. To avoid a warrant of distress for rent due, or for a bill for their stock in trade, some of these petty tradesmen eagerly sought the premium, and thus removed the imminent danger which threatened them. The future care of the apprentice, though a burthen which they had often but slender means to encounter, had not such terrors as the present peril. The representations they were thus induced to make to the directors and acting guardians had perhaps the effect of blinding them to the consequences of placing the children with persons who could but ill afford to support them, and whose means of educating them were most meagre. I cannot persuade myself that a desire to remove the burthen of a pauperised population was the chief motive which actuated the boards of these Incorporations in this matter; but if this mode of apprenticing the children was undertaken solely with a view to the advantage of the children, it lamentably failed attaining that result.

It so happened that the class of persons to whom the children were apprenticed were generally petty tradesmen of a low caste, who were usually unscrupulous in the negle t of their duties to the children. A parish apprentice is regarded as a defenceless child deserted by its natural protectors, and whose legal guardian, the parish, is only anxious to remove the burthen of its maintenance at the least possible cost, and with the least possible trouble. The apprenticeship of other children is watched by their parents. Their food, their clothing, their lodging, are all required to be consistent with their health and comfort—their progress in the art or trade is a subject of frequent inquiry; the parent or guardian is in such cases always ready to protect or defend his child or ward. Not so the parish. The overseer performs his duties for one year, and is succeeded by his neighbour. Not so the Incorporation; the directors and acting guardians are humane men,

but their family is a whole Hundred, comprising twenty or thirty parishes, and they cannot devote that sedulous attention to the case of each apprentice which a parent brings to the interests of his child.

Meanwhile, the parish apprentice was too prone to provoke, and his selfish master too eager to find, occasion to quarrel. After a certain interval had been allowed to elapse, means were often taken to disgust the child with his occupation, and to render his situation so irksome as to make him abscond. It will appear from the evidence which I have collected, that many children have thus been driven to ruin. The rural parishes have thus made a large annual contribution to the number of the juvenile offenders and felons of the cities, and especially of the metropolis. The system resembled the conscript law of Napoleon in the injury it inflicted on the poor. The destinies of the children were somewhat different; the conscripts became, to a large extent, the victims of war; the apprentices, of crime.

The more intelligent yeomen soon discovered that this system corrupted the parents, so as frequently to induce them to take their children from the farmer's service, in order to oblige the Incorporation to provide for the child by apprenticing it (see evidence of Mr. Webb and Mr. Bray), and that instead of having a useful servant, the law consigned to them the nuisance of an idle and disorderly apprentice. How great this nuisance was is proved by the amount of fines paid to avoid the infliction; at one period half the apprentices allotted during a series of years, in the Colneis and Carlford Hundreds, were refused, and the fines consequently paid. In the Hundreds of Loes and Wilford, fifty-three apprentices were, on the average, annually allotted during twenty-four years; and it appears from the report of the committee appointed to investigate the receipts and the expenditure, for twenty-four years previously to the dissolution of that Incorporation, that 5,000*l.* had been paid in that period, by the owners and occupiers, to avoid the imposition of apprentices.

The system of apprenticing children out of the Incorporated Hundreds must, to a certain extent, have been fostered by the advantage supposed to be obtained from their ceasing to be chargeable to the parish to which they originally belonged. An effort was thus gradually developed, to transfer the pauperism of the rural parishes to the towns and cities, or to procure the removal of the apparently inevitable burthen of the support of an idle and improvident class of labourers from one rural district to another. Whatever motives actuated the originators and promoters of the scheme of compulsory apprenticeship, it failed to dispauperize and elevate the class whose benefit ought to have been its sole object. In practice it generally degenerated into an attempt to shift the burthen of pauperism. While, however, one Hundred was diligently employed in burthening its neighbours, they were

all intent upon a similar project, which procured an effectual restoration of the balance. There remained the law charges and other expenses incurred in this astonishing game of see-saw, which, like all similar feats of those wonderful machinators, the parish authorities, filled the pockets of a host of parasites with the wages of the poor.

What was the price sometimes paid for the results actually obtained by the system of compulsory apprenticeship may be inferred from the following account of the cost of this expedient, during a period of successive years, in the Hundred of Samford. The whole expenditure for the relief of the poor (including this charge) is given in the same years, to enable the reader to estimate the comparative pressure of the burthen. I deem it but justice to add, that the system of compulsory apprenticeship from the Hundred of Samford appears to have been conducted with considerable skill and care, both as respects the well-being of the apprentice, and the advantage which the Hundred obtained by the cessation of the chargeability of the children. The great attention paid to their duties by the directors and acting guardians of this Hundred rendered it in many respects a model to the rest of the Incorporations.

SAMFORD HUNDRED, SUFFOLK.

Tattingstone House, 16th June, 1836.

Return of Expenses of Apprenticing and placing Children out of the Hundred, in each Year, from 1824 to 1836; including Clothing, Fees, Law Expenses, Journeys, and all other Incidental Expenses; and Amount of the Part of Premiums paid in each Year by the Parishes within the Hundred, and Amount of the General Expenses of the Hundred for the Relief of the Poor in each Year.

Lady-day to Lady-day.	Amount expended in apprenticing and placing out Children and Servants.	Amount of Parts of Premiums received from Parishes.	Balance paid from the Hundred Funds.	Amount of Expenses for Relief of the Poor.
	£. s. d.	£. s. d.	£. s. d.	£. s. d.
1824 to 1825	654 5 2	262 19 3	391 5 11	5,803 18 3
1825 — 1826	664 1 6	159 0 0	505 1 6	5,604 12 3
1826 — 1827	482 15 11	139 15 0	343 0 11	5,523 16 7
1827 — 1828	590 1 3	128 19 0	461 2 3	5,565 17 7
1828 — 1829	722 9 1	152 6 6	570 2 7	5,219 8 2
1829 — 1830	912 4 11	308 5 0	603 19 11	5,506 15 8
1830 — 1831	556 11 6	109 0 0	447 11 6	5,283 9 8
1831 — 1832	544 9 6	102 10 0	441 19 6	5,160 7 11½
1832 — 1833	481 5 6	209 10 0	271 15 6	5,325 18 10
1833 — 1834	546 1 10	111 0 0	435 1 10	4,905 6 11
1834 — 1835	391 10 6	24 10 0	367 0 6	4,520 3 3
1835 — 1836	436 10 0	157 0 0	279 10 0	3,661 10 6¾
	6,982 6 8	. . .	. . .	62,081 5 8¼

To Dr. Kay,
Assistant Poor Law Commissioner, &c.

WM. CATCHPOLE.

The evidence which follows corroborates the general statements made in the preceding portion of this Report.

"I became governor of Barham-house of Industry in 1818. At that period the system of allotting the children to the occupiers, and apprenticing them out of the Hundred, had, from the encouragement given to it, proceeded to a considerable extent. Thirty or forty children were sent into the workhouse every year by their parents, in order that they might be apprenticed by the Incorporation; and about thirty others, who were more permanent inmates of the house, were usually apprenticed every year.

"The paupers were aware that the directors and acting guardians had power to compel the occupiers to take their children, and they were usually ready to throw the burthen on the occupier by such means. A father, for example, would say to an occupier, 'I'll send my boy to the house, and then you'll be obliged to take him or pay a fine.' I know the labourers have taken their children from situations in farmers' services, in order that they might be apprenticed, and that the duty of providing for them might thus be removed from themselves to the directors and acting guardians.

"My experience leads me to say, that seven-tenths of the children thus apprenticed were complained of by their masters as useless and disorderly; the discontent among the farmers on account of this nuisance was very great.

"The amount of fines paid by the occupiers rather than take the children (20*l.* for each child) was very considerable. The fines thus received were paid with the children as a premium for their apprenticeship in the towns. These premiums induced a class of persons to make application to the directors and acting guardians for these children who had no real need of their services, but whose chief, if not sole object, was to obtain the 20*l.* premium paid with each child. These persons were usually milliners, straw-bonnet-makers, shoemakers, and petty tradesmen. The pauperism of the children was thus transferred to another parish.

"Of the children thus apprenticed out of the Hundred very few turned out well; they got into the hands of a class of persons who could not maintain them well, and who were not sufficiently respectable to take care of their morals, and who were willing and ready to get rid of them as early as they could. I have known girls driven to prostitution by the usage they experienced from their masters. The children of the labourers will be much happier and better off now that the apprentice system is at an end than they were when this system was adopted.

"The directors and acting guardians became so well aware of the mischief arising from apprenticing the children in the towns that they reduced the premium given with each child one-half, and threw other obstacles in the way, which considerably diminished the number of the children thus sent out of the Hundreds.

"As witness my hand, this 6th day of June, 1836,

"J. P. Bray."

"I was overseer of the parish of St. Matthew's about twelve years, and vestry clerk of the parish of St. Peter twenty-one years. I have, during this period, had abundant opportunity of witnessing the effects of apprenticing children from the Hundred-houses of the county, in the town of Ipswich. A premium of 10*l.* and 15*l.* was usually paid with the children. Very needy persons generally took the children, not from their want of their services, but from their desire to get the premium. I remember having called upon a woman for rates, who said she would pay me when the child was bound. I objected to the binding, because she only paid her rate just before the child was bound. I found, after these children were

bound, in many cases, that I could not obtain a rate from the persons who had taken the apprentices without distraining their goods. It was evident that the governors of the workhouses wished to transfer the paupers from the country parishes into the town; and they were so eager about it because, in my opinion, they got a premium upon each child bound out of their Hundred.

"Half of the persons to whom the children were apprenticed were eager to rid themselves of the apprentice as soon as they had got hold of the premium. Half of the apprentices were bound to no trade. Persons who could not afford to keep a maid servant took the apprentice for the sake of the premium; the child learned no trade. Half of the girls were apprenticed to persons who would describe themselves as dress-makers, and obtain the apprentice in that way.

"In several cases the apprentice was dependent on the parish; and a great many of them turned out ill. I do not think you would find in Ipswich five cases out of twenty among the females that turned out well.

"The poor-rates of the parishes of St. Matthew and St. Peter have been much increased by this system.

"As witness my hand, this 10th day of June, 1836.

"JAMES HAILL."

"I was the assistant overseer of St. Margaret's parish, which, excepting St. Clement's, is the largest parish in Ipswich, during fifteen years.

"A great many children have been apprenticed in Ipswich from the neighbouring Hundreds. This was evidently done to a great extent for the sake of getting settlements for the children in the town of Ipswich, and removing the burthen of supporting them from the Hundreds into the town.

"What class of persons took the children?—The girls were taken by straw-bonnet-makers, petty shopkeepers, and other persons of inferior means, to whom the premium was an object. The chief thing these people had in view, in my mind, was the premium. We have had to appeal to the magistrates against great numbers of these cases; and in some instances we were able to show the parties about to take apprentices did not even pay their rates. A great many little shoemakers used to take boys; and those who took these apprentices were almost always needy people.

"Those parties, having got hold of the premium, were generally desirous to get rid of the children. Some of them had not sufficient means to make the children comfortable; and, being persons low in life, they took little or no care of the children's morals. A the children came out of the workhouses, it was not difficult for their masters to find fault with them; and in many cases they either soon found some cause of complaint, which they represented to the magistrates, and got the indentures cancelled, or they quarrelled with and abused the children, so that they ran away. It was not an uncommon thing for these petty tradespeople to fail, or to go away and leave the children upon the parish. I have had a great many in the workhouse from such causes. Even if they stopped the three years, they were generally obliged to come into the house; they could not get places. We did what we could for them. Some would be in the house for years; and for others we could get a place after a time.

"Many of the girls were thrown upon the town; and several of the boys turned out ill, some of them very bad.

"It being greatly the interest of the Hundreds to get rid of the children, and the premium given with them being a great temptation to the petty tradesmen, the welfare of the children was not altogether looked to;

besides which, the directors and acting guardians were probably deceived by the story which the small shopkeepers told to get the children.

"As witness my hand, this 8th day of June,

"James Hatch."

"I was overseer of the parish of St. Clement's thirty-nine years. In that time I have known a great many children apprenticed in the town of Ipswich, from the Hundred-houses. A premium was given with these children, generally of 10*l*., and often of 20*l*. The small shopkeepers and other needy persons were very glad to get this premium, and took the apprentices for the sake of the money, and not because they wanted the children. I have often told them, 'It is the money you want, and you do not care for the children.' They used to say the children behaved very well for a few months or a year, and then they found great fault with them, and did all they could to get rid of them. I have been obliged to summon them before the magistrates, for the ill-usage of the children. One child, sent well clothed to a baker, was brought up to the town-hall in rags that would not have been picked off a dung-heap. The pauperism of the parish of St. Clement's has been amazingly increased by this system. I am decidedly of opinion that the pauperism of our parish has been at least doubled by this system alone. I think I could prove this from the books of the parish. My original accounts would soon show it.

"As witness my hand, this 9th day of June, 1836,

"Curtis Plumb."

"I have acted as magistrate in the Hundreds of Loddon and Clavering for about eleven years. As director of the Incorporation for the relief of the poor of these Hundreds, and as magistrate, I have had frequent opportunities of witnessing the effects of the compulsory allotment of apprentices.

"I consider the whole system bad, being very expensive to the directors and acting guardians, and imposing very unequal burthens on the occupiers of land, while it does not tend either to the benefit of the master or the apprentice. The master very often does not want the apprentice, and considers him a burthen; the apprentice knows that his master is bound to maintain him, and does not care how he serves him.

"Many complaints have been made to me, as a magistrate, concerning the conduct of the apprentices, and likewise by the apprentices of the ill-treatment received from their masters. It was very difficult to know how to act in these cases. The course we generally pursued was to give an admonition to the apprentice; notwithstanding which, he was frequently brought before us again in a fortnight or three weeks. We were unwilling to send the apprentices to prison, or to dismiss them. The master generally pressed for a dismissal. Some were sent to gaol, though not many; but, in most of the cases, so much ill feeling was engendered between the master and the apprentice, that we were obliged to cancel the indentures. The question of the premium which had previously been given with each child, and of the value of the clothes, was then very difficult to adjust.

"My information does not enable me to follow the child to its future destiny, but I cannot imagine he would easily find employment while so many were already out of work; besides which, the fact of his dismissal would operate against his obtaining another service.

"My conviction is, that if the whole system of compulsory apprenticeship were done away, and the law altered respecting the attainment of settlement by apprenticeship, voluntary contracts would be often entered into by the parents, which would be better both for the masters and the apprentices. The whole system would fall into a natural course, in which

the child wanting a situation would find a master wanting a servant or apprentice, and their mutual interests would be promoted by the performance of their respective duties. The natural protectors of the children would take good care that the contract was observed, which, under the former system, it was impossible for the directors and acting guardians, or for the parish, or for the magistrates, to enforce.

"Geldeston Hall, 13 June, 1836. "JOHN KERRICH."

"SIR, "Thurston, Loddon, Norfolk, 8 June, 1836.

"The many evils produced by apprenticing children from Heckingham poorhouse have for some years excited my attention; and, not being able to ascertain whether the subject has been at all entertained or considered by the Poor Law Commissioners, I am led to be bold in soliciting your attention to this important matter.

"The system of apprenticeship in the Hundreds of Loddon and Clavering has been equally injurious to the occupiers and the children. The children thus apprenticed would otherwise have been servants of the occupiers, in which case they would have performed their duties to their masters; whereas, the apprentices have usually been idle, disorderly, and vicious. This has been so much the case, that very many have not staid out their apprenticeship, their masters being obliged to apply to the magistrates for their authority to discharge them. On the part of the poor, many poor families, quite able to maintain their children, have sent them into the poorhouse for the express purpose of being apprenticed. In connexion with other proofs which I have had, every Midsummer quarter an increased number of children has been admitted into the house, it being a standing rule that the children were required to be inmates of the house at least fifteen months previous to their being bound out, which has always been at Michaelmas in each year. I consider this has been a separate feature of pauperism, and has been the means of pauperising and prostituting more persons than any other system in these Hundreds. The girls, by reason of their independent impertinence and other misconduct above alluded to, do but rarely obtain a good character; so that, whether discharged from their apprenticeship or not, they either return to the poor-house or become prostitutes. The latter course is taken in the case of Harriet Dunnet, who was discharged from her apprenticeship last summer. She is now a common prostitute; and I have reason to think the magistrates are fully aware of the immoral conduct of girls thus thrown into temptation, as they are ever wishing to punish by imprisonment rather than discharge an apprentice; nor do I believe they have ever done it unless the cases were notorious. With respect to the boys, they have inherited the like impertinençe which the girls have shown, with fixed and determined idle habits, which I attribute in a great measure to the want of being initiated into agricultural labour with their respective fathers, and which they altogether lose in a workhouse. I fear you will think me troublesome, but I hope to be excused, as I wish to call your attention to one or two other evils arising out of this apprenticeship system; viz., I have known children taken away from employment in which they earned sufficient wages, in order that they might be apprenticed. I remember particularly the case of a boy, Moss, who was in Sir William Beauchamp Proctor's employment, and whom his parents took away to apprentice him, though he was getting good and sufficient wages. On Monday week I proved that a woman would not, after application, receive an admittance into Heckingham house for two of her children, because I told her I did not think the Poor Law Commissioners would allow the pernicious system of apprenticing children to be continued. I hope I may be pardoned for presuming to entertain or prejudge any opinion which the Poor Law Commissioners may have formed on this

matter, but I have thought the Poor Law Amendment Act has this feature about it; viz., a full and determined purpose to prevent fraud, to establish on the wreck of former misgovernment a good moral principle in the poorer classes, and to benefit the public in general. To accomplish which, I think it impossible to the fullest extent that may be, unless the apprenticeship system be discontinued, or permitted to exist only in extreme and necessitous cases; therefore I felt certain that the Commissioners, with such laudable objects in view, could not have wholly overlooked an inlet into so much vice and poverty on the part of the poor, and expense to the occupiers, which the apprenticeship system has led to in these Hundreds.

"I must beg to conclude my remarks by giving you a few items of cost which this apprenticeship system is to the occupiers, which will give you a further proof how noxious the system is which I am complaining of, and will show you the great objection and sacrifice of money occupiers have to parish apprentices. And here I beg to state a premium is universally given in all the parishes throughout these Hundreds. In this parish it has varied from 9*l.* to 15*l.* The period of apprenticeship has never exceeded three years; but of late it has been but two years. In an adjacent parish (Berghapton), where the population is about 240 persons, the occupiers subscribed 48*l.* last Michaelmas for their apprentices; and it is a palpable fact, that the father of each child was able-bodied, and in good and constant employment: moreover, the three united families amounted only to thirteen children. At Michaelmas, 1834, there was subscribed, in the same parish, 26*l.* or 27*l.* for one apprentice. These several sums, with fifteen months' board and clothing in the poorhouse, have to be expended, besides the making out of indentures, &c., &c. You will perceive the amount is considerable, the period of apprenticeship short, the inhabitants few; and this serious amount is extracted from the pockets of the suffering farmers, with scarcely a glimmer of satisfaction arising out of so heavy an outlay, but have frequently to contend with insult from the paupers, by being told 'they shall have another child to apprentice another year.' A man by the name of Etteridge has often boasted to the effect stated.

"Dr. Kay, "HARRY WEBB, Farmer.
"Assistant Poor Law Commissioner."

"It was almost the universal practice in the Blything Hundred for poor persons to send their children into the Hundred-house, to be bound out. As soon as the children came to a certain age, they used to claim it as a sort of right. They preferred this system to the trouble of finding places for their children; they were then sure that their children would be clothed and supported for four or five years, without any trouble or expense on their part. They shifted the trouble and responsibility of their family off their own shoulders on to those of other persons, so long as this system prevailed. Just previous to the period of the annual binding, a great increase of the number of children, of the age to be bound out, occurred in the house. The disposition of the parents to rely on the parish for assistance was evidently increased by this system, and the character of the children was not at all improved; they in their turn became paupers. I have frequently known them to apply for relief as soon as their apprenticeship was over, marry soon afterwards, and come into the house with their wives.

"I have heard complaints of the bad conduct of at least one-half of the children bound out. The apprenticeship, in the majority of instances, did not make the children better acquainted with their trade or calling, or increase their disposition to labour, but quite the contrary. In many cases I have known them quite reckless. The disinclination of the

occupiers to receive them was extreme; frequent applications and memorials were conveyed to the Board, against the allotments. The irritation occasioned by this compulsory system of binding became so great, that the Board adopted the plan of giving an annual premium with the children. The dissatisfaction was somewhat allayed for a time by this concession; but the system did not work well, and the same feelings of discontent recurred.

"As witness my hand, this 10th day of June, 1836,
"DAN. FORMAN."

"I have been overseer of the parish of Halesworth eight years. When I came into office, finding a great many people out of work, and incumbered with large families, I considered it my duty to clear their families as much as possible by apprenticing the children. In this way thirty children have been apprenticed in this period, in the parish of Halesworth. My experience of the effects of apprenticeship has led me to change my opinion concerning this system. Not more than a quarter of the children have turned out as we could have desired, and half of them have become profligate or reckless, and the other quarter have remained quite stationary, threatening the parish with dependence. This system was much complained of by the rate-payers; 80*l.* fines were paid for the refusal of apprentices in this period. It was an extreme inconvenience to some of the small rate-payers to take the children, because they had no need of their services, were scarcely able to support them, and too poor to pay the fine. Another bad effect was the influence of this system on the minds of the parents: they neglected to provide for their children, and threw the burthen on the parish, under the impression that they had a right to do so. The parents insolently demanded, as a right, what we imagined they ought to have received as a boon, and the children were insolent and disobedient to their masters, being told by their parents that their masters could not get rid of them without a vexatious process before the magistrates. Even then a riddance could not be had of this nuisance unless theft or some other similarly gross offence could be proved: simple disobedience and uselessness were not sufficient to obtain the magistrates' consent to the cancelling of the indentures. Formerly it had been necessary that the children should be twelve months in the house before they were bound out. In order to avoid the expense of maintaining the children for so long a period within the house, the directors and acting guardians, in 1829, reduced the time to six months. This change occasioned such an increase in the number of children sent into the workhouse to be apprenticed, that it was found necessary, in 1834, again to increase the period during which the children were required to be in the house to twelve months. My impression is, that in the eight years during which I have been in office, this system has occasioned a clear loss to the parish of at least 600*l.*, besides inflicting great injury on the morals of the parents and children.

"As witness my hand, this 11th day of June, 1836,
"ISAAC CARR."

From the preceding facts I am inclined to deduce the following general conclusions. The maintenance, clothing, lodging, and training in a useful calling, of the children of the poor, is a responsibility naturally devolving on the parents, with which it is mischievous to interfere.

The transference of this responsibility from the parents to the public encourages premature and improvident marriages, tends to diminish the natural affections of parents and children, by making

the parents cease to be the sources of the well-being of their offspring, and increases the tendency of the poor to rely upon the public for the support of their families, rather than to resort to their own exertions.

The apprentice system has been an injury to the children whom it was intended to benefit, since the care which an Incorporation can take of the comfort and improvement of its apprentices is less than a parent would naturally exercise over the well-being of his child. The children placed under the guardianship of the public have descended to a lower moral and social condition than would have been their lot, if the parents had performed their natural duties.

To substitute the guardianship of the public for the guardianship of parents is therefore mischievous, and can only be resorted to when the parental guardianship is brought to an end; as for example, when on the death of one parent, the other is an idiot or lunatic, or is convicted of some offence against the laws, depriving him of liberty for a series of years; or is transported beyond the seas; or has absconded, and cannot be found, and the family are consequently chargeable to the parish; or when both parents are thus circumstanced, provided there be no other relatives liable under the 43d of Elizabeth to provide for the support and education of the children, in which case the guardians of the poor are bound to enforce the performance of the legal duties of such relatives towards the children.

The public becomes the guardian of orphans who have no relatives liable to provide for their maintenance and instruction.

I beg to suggest that the Poor Law Commissioners for England and Wales require an annual return of the names and various circumstances relating to the condition of all children included in the above-mentioned classes, who are chargeable to any parish or Union.

That they should require that children whose natural guardians are totally incapacitated from making provision for their maintenance and instruction, be put to some useful occupation, by the mode of hiring and service, without premium.

IV.

REPORT ON THE NORWOOD SCHOOL OF INDUSTRY.

By JAMES PHILLIPS KAY, Esq., M.D., Assistant Poor Law Commissioner, and Secretary to the Committee of Council on Education.

GENTLEMEN, *London, 1st May,* 1839.

SINCE the publication of your last Annual Report, having been directed to undertake the superintendence of the Metropolitan District, I have, in connexion with other duties, been specially charged with the improvement of the establishments for the training of pauper children in London and its vicinity.

Other engagements required so much of my time until the month of August, that up to that period I was able to do little more than make myself acquainted with the condition of the schools in the contractors' establishments and workhouses.

In the contractors' establishments considerable property had been invested, and though the arrangements were in all respects imperfect, and especially so in everything that related to the religious, moral, and industrial training of the children, yet in the present defective state of the law, it appeared inexpedient (notwithstanding the evils inseparable from the system of "farming out the poor") to require that these establishments should be abruptly broken up; and it seemed reasonable that, as considerable personal interests were at stake, the proprietors should be afforded a period of probation, during which, by the advice and assistance of the Commissioners, they might be enabled to render their establishments more satisfactory, in all that related to the training and management of the children.

The schools in the workhouses were almost universally found equally imperfect, if not, in some instances, worse than those in the contractors' establishments.

In some workhouses, the children were not separated from the adults; they were instructed by paupers; no industrial instruction was given them; their moral training was altogether neglected, and their corruption and ruin certain.

In others, efficient teachers had not been procured, proper

books and apparatus were wanting; the arrangement of the routine and organization of the school exhibited a complete ignorance of method, and universally the industrial instruction was meagre and purposeless.

The interference of other duties has necessarily rendered the proceedings for the re-organization of the schools for the training of pauper children slow, and their success is still very incomplete. The state of the law is at present so imperfect, as to place the only means available for the improvement of some schools entirely beyond the authority of the Poor Law Commissioners and Boards of Guardians. In other cases the Boards of Guardians are deterred from making final arrangements concerning their schools, because the whole of their workhouse arrangements are unsatisfactory, and they therefore consider it inexpedient to incur any considerable outlay in the erection of a children's establishment, before the claims of conflicting interests are so adjusted as to enable them to decide what may be the best arrangements for the adult paupers.

Many of the rural boards have used great exertions to procure efficient schoolmasters, and though I have seconded these exertions earnestly, they have in almost every case failed, in consequence of the small amount of remuneration offered by the Boards of Guardians for the services of a schoolmaster and schoolmistress in their very small workhouse schools. No satisfactory arrangements can be made for the rural Unions until power is obtained to create District schools, by the combination of Unions for that purpose, and the creation of a Board of Management for the regulation of each school.

Notwithstanding these and other impediments, some satisfactory results have been obtained in London and its vicinity in the improvement,—

1. Of schools in workhouses.
2. Of separate children's establishments belonging to Unions or parishes.
3. By the creation of separate children's establishments for Unions, and their right regulation.
4. By the improvement of certain of the contractors' establishments.

The enumeration of what has been done in each individual case would lead to a useless repetition, as the arrangements have several features in common. It appears rather expedient to select an example in which the chief of these features are assembled, and a description of which may convey an accurate view of the principles by which the improvements have everywhere been regulated. The establishment which conveys the most complete example of what has been sought to be obtained is the School of Industry, under the management of Mr. Aubin at Norwood.

On visiting this establishment, I found one-half of the children instructed on the plan of the National Schools; the other on the system of the British and Foreign School Society; the method of mutual instruction therefore prevailed.

The means adopted for the religious instruction of the children were inadequate, and were not in conformity with the provisions of the law; the moral training of the children was in every respect extremely defective.

The industrial instruction of the boys was confined to the sorting of bristles, and the making of hooks and eyes; occupations of the most cheerless description, incapable of exercising the ingenuity of the children, useless in preparing them for any future duties, and pernicious because they disgusted them with labour. The girls were taught to sort bristles, to thread the hooks and eyes upon cards, and were instructed in needlework; they also were partially employed in making the beds and cleaning the rooms.

The recreation of the children was not encouraged by any systematic arrangements.

The schools contained only a meagre supply of the implements of instruction used in the National, and British and Foreign Schools.

In these arrangements Mr. Aubin was guided less by his own judgment than by an estimate of what he conceived would be satisfactory to the various Boards of Guardians.

Impressed with the belief that the Boards of Guardians had been prevented, by the number and urgency of the duties devolving upon them since the passing of the Poor Law Amendment Act, from undertaking a minute inspection and careful revision of these arrangements, I visited the various Boards, and described the improvements suggested by the experience of the Poor Law Commissioners, for their concurrence.

Mr. Aubin's establishment contained about 1,100 children of all ages under 15, and received from so many parishes and Unions as to render the concurrence of all the Boards of Guardians in any improvements impossible through any other agency than that of the Commissioners. The approbation of the plans suggested was however expressed by almost every Board at the moment it was sought, and these improvements have since obtained their cordial encouragement.

The appointment of a chaplain appeared a matter of primary importance. By the Poor Law Amendment Act, provision is made for the instruction of all children belonging to the Established Church, by the appointment of a chaplain, who is licensed by the diocesan. By the 19th section of the Act, the religious instruction of the children who a[re] inmates of workhouses, and whose parents do not belong to the Established Church, is com-

mitted to the licensed minister of the persuasion to which the parent or natural guardian of the child belongs, in every case in which a wish to that effect is expressed.

The number of children assembled at Norwood, and a neighbouring contractor's establishment, appeared to render it desirable that a chaplain should be selected, whose duty should consist in performing Divine service on Sunday—in regulating the routine and matter of religious instruction on that day, and in superintending the special religious instruction of all children whose parents or natural guardians did not object to their receiving such instruction during the week. A considerable period necessarily elapsed before the arrangements preliminary to such an appointment could be effected; but they at length satisfactorily issued in the election of the Rev. Joseph Brown, then of Mill-hill.

The letter which you have addressed to the chaplain evinces your anxious desire that the children committed to his care should receive such religious instruction and training as may, under the blessing of Providence, exert a practical influence on their conduct in after-life.

The chaplain's duties are performed in conformity with the terms of your letter; and the publication of that letter, together with the remarks on this subject, submitted in the Report of last year, render any further allusion to the religious instruction of the children here unnecessary. I may, however, convey to you the assurance, that not only the general regulations, but the habitual practice of the school, give due prominence to such instruction.

Your experience in the religious and moral training of large establishments of children led you to prefer a modification of the simultaneous method of instruction, combined with what is technically termed the synthetical, as contrasted with the unmodified plan of mutual instruction and dogmatic teaching prevalent in this country. No agency existed in England by which the simultaneous method could be communicated to teachers. The expectation of personally communicating the knowledge of such a method (by such casual visits to the schools as your assistants could make) could not be seriously entertained; and it therefore appeared at an early period expedient that an examination of those schools in which this method was practised should occur with a view to determine from what source a supply of teachers, even partially acquainted with it, could be obtained.

The simultaneous method was believed to be chiefly practised in Scotland; and the visit which my colleague (Mr. Tufnell) and I had made to Scotland in the previous year, enabled you to procure teachers from the Normal school at Glasgow.

The teachers procured from this source have invariably been distinguished by their sense of the moral and religious responsi

bilities of their office, and by their correct moral conduct. Their attainments and skill have necessarily varied; but amongst those introduced into the workhouse schools of Middlesex, Surrey, and Kent, some of these young men have distinguished themselves, not less by their zeal than by the respectability of their attainments and their knowledge of some departments of method.

To facilitate the adoption of the simultaneous method, the boys' school was divided into five classes, of from 40 to 50 children each; the girls' school into four classes, each containing 40, besides other classes employed in the workshops. In each class the children are arranged in four grades of desks, each grade containing 10 or 11 children. Each grade rises four inches above the preceding, so that the last desk is a foot higher than the first. The desks are each 15 inches wide; and each desk, with the space for the form and passage behind it, occupies about three feet. The four grades, therefore, occupy 12 feet, and six feet, at least, ought to be left in the front of the desks for the teacher; but the limited extent of the rooms at Norwood did not afford us more than four feet in any case. Each class is separated from those adjacent by curtains, which fall from the ceiling, and which are drawn up by ropes adjusted as in a Venetian blind. These curtains subdue the noise arising from the teaching of large numbers in the same room: they likewise prevent the distraction of the attention of the children by surrounding objects, and enable the teacher to concentrate the energies of the class on the matter of instruction he has to convey to them; but solid wooden partitions sliding into the adjacent walls are preferable to curtains, when so prepared as to be moved with ease, and effectually to exclude sound. *Separate apartments, arranged on a plan facilitating inspection from a central room, afford, however, the best means of instructing classes of* 50 *on the simultaneous method.* The means at command at Norwood compelled the adoption of curtains of green baize, which have been found very useful.

Each school is also furnished with a gallery similar to those commonly used in infant schools, in which 100 children may be assembled for simultaneous instruction in matters requiring less technical proficiency than those which form the subjects of instruction in classes. The gallery is also employed for religious instruction, for serious moral admonition on any occurrence in the school, and also for instruction in singing.

For each class monitors have been selected, who are chiefly employed in superintending the mechanical daily routine; that is in assisting the teacher in assembling the class in order, in procuring and preserving silence and attention, in distributing the books, slates, pens, &c., in superintending lessons in which moral training forms no element, such as writing and ciphering. From

these monitors have already been selected those most distinguished by zeal, skill, attainments, and gentleness of disposition, who are to be apprenticed, and reared as teachers. The organization of each class will not be complete until it has at least one monitor and a pupil teacher; and when the pupil teachers have acquired considerable skill, and the arrangements for the instruction of the monitors are complete, it is believed that 100 children may with such assistance be instructed by one master, alternately, in two classes of 50, and in the gallery. Such an arrangement, however, supposes that one of these classes shall be employed in writing, ciphering, composition, or drawing, while the other is receiving instruction from the master in reading geography, and other matters of general knowledge. The monitors and pupil teachers sleep in a room apart from the rest of the children; they have also recreation in a separate garden, and in the evening receive instruction in a room situate there, where they also read and prepare the lessons for their classes on the succeeding day.

The pupil teachers are distinguished by a uniform dress, and wear upon their arms the number of the class to which they are at the time attached.

In consequence of the solicitation of friends, and of some Boards of Guardians, you have admitted a few candidate teachers to receive such instruction in the theory and art of teaching as can be acquired by observation only, for three months at Norwood; but I submit it is expedient to adopt a rule that in future none shall be admitted for a shorter period than six or twelve months, and that all be recommended to remain a longer period; and that every candidate teacher should be required to produce the strongest testimonials of his religious and moral character, of the respectability of his attainments, and of his preference for the vocation of a teacher. The candidate teachers pay 11*s*. 6*d*. per week for board, lodging, and washing.

Some children of schoolmasters, and some of the most intelligent boys in workhouse schools, have been sent to Norwood either by private individuals or by Boards of Guardians; and have, in consequence of strong testimonials of character, attainments, and fondness for the duties of a teacher, been admitted into the class of pupil teachers. In such cases it is required that each child shall be furnished with the uniform of the pupil teachers, at the expense of his patrons; and that 5*s*. per week shall be paid for his board and lodging; and it is now necessary to require that they shall be apprenticed for a term of five years, after a certain period of probation, so as to secure their being so reared as to enable them rightly to discharge the duties of a teacher.

The indenture of apprenticeship stipulates that the moral conduct and character of the pupil shall continue to be such as to

afford the superintendent teacher a confident expectation of his success. Each child will undergo a formal half-yearly examination, at each of which successive periods he will be required to prove his qualification to complete his apprenticeship by his attainments in the several branches of instruction and school discipline. The subjects of examination will be so graduated as to test his proficiency and talent rising in each successive half-year towards the examination required from candidate teachers, after a certain residence in the school.

In a large school containing teachers, candidate teachers, pupil teachers, and monitors, and in which the simultaneous method is resorted to, the following internal organization is adopted, and will soon be in operation at Norwood, in conformity with your directions; but it is perhaps desirable to remark, that small schools require an organization totally differing from the arrangement described, as desirable in the particular case selected. Each class contains 50 children, and is furnished with at least one pupil teacher and a monitor. Two classes of 50 children each have, besides their pupil teachers and monitors, one teacher and one candidate teacher attached to them; the teacher instructs each class alternately, or both classes together in the gallery; the candidate teacher listens to the instruction given in the gallery; or, when he has attained sufficient proficiency, occasionally assists the teacher in giving these lessons. The candidate teacher also instructs one of the classes at the desks alternately with the teacher, so that they are both always receiving instruction either from the teacher or candidate teacher. Candidate teachers are not entrusted with the instruction of the children until they have been some time in the school; and they are then first attached to those classes which require the smallest amount of skill, and the most slender attainments, and afterwards to those where greater proficiency is requisite. The means for instructing the candidate teachers at Norwood will require to be enlarged and improved, as soon as it is apparent that the demand for teachers trained in this school renders such measures expedient.

The synthetical method supposes that the teacher leads the children from the known to the unknown by such gradual steps as to require no effort of analysis on their part, but to render the knowledge of general facts the consequence of an acquaintance with the elements from which they spring. When this method is employed in combination with the simultaneous, the acquisition of knowledge is invested with its natural attractions, and the efforts of the children second those of a teacher of a mild and persuasive character so earnestly, as to remove the necessity for the adoption of the too prevalent practice of coercion. The moral discipline of the school is thus dependent, in a great degree, on

the method of instruction; and when it is proposed that religion shall mingle with the whole tissue of internal discipline, the regulation of that discipline, so as by paternal kindness and wisdom to inspire confidence and regard, becomes one of the most important objects of solicitude. To hope to rear the children in the practice of mutual forbearance and goodwill, and in respect and love of their instructor, while the teaching is such as to require the memory to be loaded with what is not understood, is vain; because the teacher, by such a method, strips knowledge of its attractions, and encounters the necessity of enforcing application by the fear of punishment and the hope of reward. Inferior motives being appealed to, the moral discipline of the school is reduced to a lower standard, and good conduct rather results from the vigilance of the superintendence than from that right regulation of the motives to action which removes the necessity for much vigilance on the part of the teacher. On the contrary, when the children are so taught that learning is among their chief pleasures, harmony subsists between them and their teacher, whose mind being generally in contact with theirs, becomes not merely the source of knowledge, but of right moral and religious sentiments and motives; so that, in the intercourse of the daily routine, they grow up around him as members of one family.

The mind of the teacher being generally in contact with that of every child under his care, supplying him with knowledge and teaching him to think, the child's character is moulded according to his will. A process of assimilation in habits of thought, in knowledge, and manner is constantly in operation, proving the truth of the axiom which prevails in the schools of Germany and Prussia, that "as is the teacher, so is the school." A spectator is surprised to find that the simultaneous answers instantaneously given to questions which have never been asked before are generally made, not merely correctly, but in the same words, by the whole class; so that a well-practised class appears almost to have one mind, and has certainly realized much individuality of action.

Under this method nothing is learned by rote, and the attention and attainments of the children are tested, not merely by requiring answers from individuals during a simultaneous lesson and at its close, but by occasional interrogative lessons at the desks, in which the children are required to make written replies; and the lessons on objects especially are tested by requiring the children to write on their slates what they remember of the lesson, which, besides affording a proof of their attention and memory, is an excellent exercise in writing, spelling, grammar, and the art of composition. The first and second classes at Norwood already write out on the slate with ease and accuracy the chief elements

of the lessons which they have received in the gallery, and other classes are undergoing constant practice in the same art.

The matter of instruction is so selected as to bear a constant relation to the future social duties of the children. From the earliest period an effort is made to connect each acquisition with a sense of its practical utility. In the infant school the children are taught to recognize the characteristic differences of the letters by drawing and writing them, either before or at the same time as they learn their powers and names. They more easily distinguish the characteristic differences of these forms when they attempt to imitate them, which is a source of constant but calm amusement. When entrusted with a piece of chalk and slate for this purpose, they learn to draw straight and curved lines of various kinds, in order to enable them to recognize and imitate the characteristic features of the letters. While thus making the first step in linear drawing, they learn the Roman and the written alphabet, and have already begun to write. Writing and drawing may thus in a school be regarded only as modifications of the same art, and while the children are taught to imitate and combine letters with skill and rapidity, they may easily be led to imitate the forms of simple objects, such as houses, implements, animals, &c. That most difficult step, the knowledge of the Roman and the written character, is thus changed from a matter of mere dogmatism, in which the memory alone is employed, to an exercise calling various other faculties into activity, and sustained by the sense of utility which it inspires. In learning to combine letters into words, the children use a toy resembling those employed in some of the Dutch and Belgic schools, by which letters are formed into words suggested by the teacher. These words are chiefly the names of objects capable of illustration by a picture, which is presented at the same moment as the printed characters to the eye of the child. The analysis of the signs of sound being thus in the earliest stage connected with the visible representation of the object named, the children never have a sense of the combination being arbitrary and useless, but at once understand its convenience.

A similar process is followed in all the successive stages of instruction. The writing and drawing are in course of introduction, by means of the infant school, to all the junior classes of the school for older children. The children are not allowed to read any combinations of letters which are not real words, and are instructed in the meaning of every word, and exercised in attention to the sense of the sentences of which the words form a part. The lesson-books are so selected as to afford useful information, and as the children advance in the school they are entrusted with books adapted to the state of their attainments. The "Reading

Disentangled," of the Home and Colonial Infant School Society, is followed by Mr. Wood's First and Second Books of Lessons, used in the Edinburgh Sessional School, by the Class-Reading-book and History of England of the Society for Promoting Christian Knowledge, and by other books of a similar character. As the children rise in classes in the school they receive lessons on objects, by which they are made familiar with the metals, earths, wood, and various animal substances used in industry and commerce; they are taught whence and how they are obtained; in what state; by what processes they are prepared for use in other branches of industry, and ultimately for purposes of domestic or social utility. They are made acquainted with the seats of various manufactures; the nature of the labour required in the various processes; the wages and condition of the artisans employed in such manufactures, and the causes of their comparative well being. Such lessons afford good opportunities of impressing the children with a sense of the duties of their future station in life, and the teacher does not fail to draw their attention to the consequences of prudence and industry as contrasted with the results of improvidence and vice. A series of maps are in preparation, showing the districts in which each branch of industry flourishes in England, so that their acquaintance with geography chiefly consists of a knowledge of the distribution of labour. The books read by the children also describe various handicrafts; and in the girls' school, reading-books are employed treating of the duties of domestic servants, in their various situations in life, as maids-of-all-work, dairy-maids, ladies' maids, nurses, &c.

Ciphering and mental arithmetic hold their due place in the matter of instruction; and the greater part of the hints respecting the method, matter, and means of instruction contained in the Report on the Training of Pauper Children, published in your last Annual Report, have been practically realized. I have, therefore, contented myself in this place with a very slight sketch of those improvements which it then appeared unnecessary to announce, but which are now in course of adoption.

The Scriptures are read daily in the school, and a period is set apart for special religious instruction, in which the Catechism is taught to children belonging to the Established Church, either by the chaplain personally, or in strict conformity with his directions; and other children, if required, receive special religious instruction from their religious teachers apart.

The children, on the day they are employed in the workshops, receive a lesson in the Bible, besides attending the morning and evening prayers.

Very much yet remains to be attained, both in the matter and the method of instruction, which, as it is not yet commenced, it is undesirable to anticipate here. Some plans which are now in

course of adoption may, however, be noticed, though *the whole establishment must be regarded as only in the first stage of improvement, the development of which can be attained only by cautious perseverance.* Those improvements, therefore, which have not yet been introduced, either on account of the limited means at our command, or in consequence of the short period over which our exertions have extended, are unnoticed in this brief report.

The children are beginning to keep accounts of the results of their labour, as an exercise illustrating the utility of their knowledge of writing and ciphering, and accustoming them to the practical application of those arts. They will acquire further facility in keeping such accounts, by being practised by the teacher in writing and summing up accounts of the expenses of a household, and of the application of his wages under various circumstances, and in various situations.

The girls are accustomed to make inventories of clothes, to write out receipts for frugal cookery, to make out bills of articles sold from small shops, and to keep accounts of domestic expenditure. The attention of the oldest classes in the school is steadily directed to the dangers, advantages, duties, and responsibilities of the station they are about to occupy; they are carefully warned against the causes of failure, and instructed how prudence and industry may best secure them from being overborne by the accidents of life.

Singing is already taught with considerable success. Divine service on the Sunday is thus conducted with much greater solemnity and propriety, and weariness and languor are constantly dispelled from the workshops and school by cheerful moral songs, which give an encouraging view of the duties and cares of a labourer's life. The children sing in three parts, are instructed in the notation of music, so as to enable them to retain and extend their acquaintance with vocal music in after-life. Two of the best singers are musical monitors, and are constantly employed in instructing the classes in succession in the elements of notation.

One half only of the period assigned to instruction is devoted to the lessons in the school; the other half of this period is employed in the acquisition of skill in handicrafts in the workshops. At present, the children are engaged six hours daily, alternately in the workshops and in the school: thus the boys employed in the workshops on Monday are instructed in the school on Tuesday, and are succeeded in the workshops on the Tuesday by boys who were in the school on Monday. Classes of 50 tailors, of 40 shoemakers, of 3 or 4 blacksmiths, of 8 tinmen, of 2 or 3 ostlers, of 4 or 5 carpenters, and of about 30 mariners, are constantly receiving instruction, the members of each class being changed on

alternate days. Boys under eight years of age are taught straw-platting; and basket-making is about to be added to the rest of the employments; and a field has been hired for out-door labour. This field will be divided into separate plots, which will be cultivated chiefly during the hours of recreation by the most deserving boys, under the instruction of a competent master. The clothes, shoes, tinware, and iron-work of the establishment are made and mended by the boys; the horses are groomed; and important assistance is rendered to the carpenters. A mast has been erected in the exercise-ground, by a pensioner, sent for the purpose by Lieutenant Rivers, of Greenwich Hospital, on which the mariners' class is daily exercised in seamen's duties; as well as in the naval and military drill, by a seaman-gunner obtained from the "Excellent" at Portsmouth, and in the management of four six-pounders, which are manœuvred on the deck. They are thus thoroughly prepared for the merchant service. Gymnastic apparatus has also been erected in the exercise-ground, where the boys are daily trained in exercises calculated to develope their physical strength and activity, and to introduce regularity into the movements of so large a body of children, to secure prompt obedience to the directions of the teacher, and to maintain personal cleanliness and propriety.

The moral training pervades every hour of the day, from the period when the children are marched from their bed-rooms to the wash-house in the morning, to that when they march back to their bed-rooms at night. By the constant presence of some teacher as a companion during the hours of recreation, they are taught to amuse themselves without mutual encroachment; they are trained in the practice of mutual forbearance and kindness; they are taught to respect property not their own, to avoid faults of language and manner, to treat their superiors with respectful confidence; they learn to show the affection they bear their teachers without fear of rebuke, to approach strangers with a simplicity of manner to which servility and audacity are alike foreign; they are trained in the practice of their religious duties, in a reverential observance of the Sunday, and in deference to the instructions of their authorized religious teachers. Propriety of demeanour in their bed-rooms and at meals is a matter of special anxiety.

The girls are employed in the household duties, namely, in scouring the floors, making the beds, and waiting upon the teachers; in washing, ironing, and mangling the clothes of the establishment; in knitting; and in sewing and marking linen. The special instruction of their school renders them acquainted with the duties of a maid-of-all-work, a dairy-maid, a lady's-maid, a nurse, and with the household economy of a labourer's family. Their attention is directed to the duties and rewards of females generally in humble situations of life; they are warned

of the destruction that lurks in the path of apparently venial errors; the caution and perseverance requisite to secure their permanent well-being.

The instruction of the girls in household work will, it is hoped, in future be systematically conducted, so as to secure habits of neatness, order, and skilful management. The care of young children it is intended shall not be regarded only as a casual duty, but as a source of important instruction. The management of the sick is to be so conducted, under the superintendence of careful nurses, as to become a prominent part of the education of the girls.

A kitchen has recently been prepared, in which the older girls are instructed in plain cooking, such as would be required for a family of the middle classes, and in such frugal cookery as would enable the wife of a labourer to apply his earnings in the most economical manner to secure the comfort of his household.

A plain dinner is thus cooked by the girls for 15 teachers and candidate teachers, whose breakfast and tea are likewise served, and attended by the girls in this department.

A frugal meal, consisting of cheaper but wholesome materials, such as could be afforded by a workman, is also daily prepared for the labourers and pupil teachers by the girls instructed in the kitchen. They thus become practically acquainted with many receipts of frugal dishes, which are made the subjects of special instruction in the classes in the girls' school, where they are practised in writing out these receipts, with the prices of the various ingredients, from memory.

Mr. Aubin has six cows on his farm. These cows are henceforth to be milked by the girls; and a dairy is about to be erected in his yard, in which they will be familiarized with duties almost equally useful to a domestic and to a farm-servant.

None of these improvements can be permanently engrafted on contractors' establishments, unless their practical utility to the contractor as well as to the children is demonstrable; and their introduction under such circumstances is therefore necessarily slow, especially as their success is also dependent on the establishment of a higher moral standard, in the internal discipline of such establishments, than that which has hitherto prevailed.

The girls, equally with the boys, are employed, during half the time allotted to instruction, in the foregoing domestic occupations; and it is intended that the matter of instruction communicated in the school shall be such as may be best adapted to prepare them to fulfil all the practical duties of their station in life.

The schools are provided with a library which, for the present, consists chiefly of the books published by the Society for Pro-

moting Christian Knowledge, and other similar publications. The books are eagerly perused by the most advanced children.

A small cabinet of natural objects has been provided, to aid the teacher in giving object lessons.

The apparatus of the school is meagre, being limited to what is absolutely indispensable.

These improvements have been more or less in progress during the last eight months; but a large body of the children (400) were, to a recent period, instructed on the plan of the National School Society.

The effects of the industrial and moral training are stated by the teachers to be apparent in the improved habits of the children. As they are chiefly orphans, deserted, illegitimate, or the offspring of persons undergoing punishment of crime, they are, in fact, children of the dregs of the pauper population of London, and have consequently been, for the most part, reared in scenes of misery, vice, and villany. Their physical conformation and physiognomy betray that they have inherited from their parents physical and moral constitutions requiring the most vigorous and careful training to render them useful members of society. They arrive at the school in various stages of squalor and disease; some are the incurable victims of scrofula; others are constantly liable to a recurrence of its symptoms; almost all exhibit the consequences of the vicious habits, neglect, and misery of their parents. Visitors invariably remark the prevalence of a singular formation of their heads; that the boys have almost universally coarse features, and that the girls are almost all plain. These remarks are very just now; but eight months ago these ugly features were seldom irradiated by a gleam of intellectual expression; and to the physical coarseness were added traces of suspicion, obstinacy, and gloom.

The children now at least display in their features evidence of happiness; they have confidence in the kindness of all by whom they are surrounded; their days pass in a cheerful succession of instruction, recreation, work, and domestic and religious duties, in which it is not found necessary to employ coercion to ensure order. Punishment, in its ordinary sense, has been banished the school, and such slight distinctions as are necessary to mark the teacher's disapproval of what is wrong are found efficacious.

Petty thieving, which was the daily and almost universal vice of the school, is at an end, excepting among boys recently introduced from such haunts of crime as Saffron-hill and St. Giles's. Nothing is now lost by any boy which is not soon found, and voluntarily restored to him through the medium of the teacher; whereas any toy or piece of money was irrecoverable formerly, when once lost sight of.

Strangers are approached with confidence and respect; a rule of mutual forbearance and goodwill is established among the children; their conversation is correct, and their demeanour more decent. Personal cleanliness has become a habit requiring little vigilance to secure its prevalence.

The habit of speaking the truth is constantly tested by the teachers, and it is believed that much progress has been made in establishing fidelity in this respect.

By persevering attention alone can higher moral results be secured; and the labours of the chaplain are now devoted with great assiduity to the religious improvement of the children.

The industrial training of the children has already had the effect of reducing the age at which they are received into service, and of rendering premiums and apprenticeship unnecessary; not, however, in consequence of their skill in a particular handicraft, but because the children have acquired industrious habits. Such habits ensure their going to service at 13 years of age, with no other outfit or premium than a suit of clothes; whereas formerly boys often remained in the school until 14 or 15, though great exertions were made to apprentice them, and though the temptation of a premium of 10*l*. was commonly offered with them.

The pernicious consequences of the apprenticeship system in the management of pauper children have been described in your Second Annual Report, and it is, therefore, unnecessary further to allude to the advantages flowing from the gradual eradication of this fruitful evil.

A boy at 13 years of age, if trained at Norwood from the age of nine, would (besides the results of his religious and moral training, and of his instruction in knowledge suited to his station in life) be able to make and mend his own shoes and clothes; he would be acquainted with the rigging of a vessel; with a seaman's duties generally; be practised in the naval drill and gunnery, and in gymnastic exercises; and would, therefore, be well qualified to go to sea, either in the merchant service or in that of Her Majesty's navy

Other boys would be able to make tin-ware, would be very useful assistants to blacksmiths, or to grooms; and, ere long, it is intended to have a class of gardeners.

A girl would, at the age of 13, know how to knit, to sew, to scour floors, make beds, and clean plain furniture, and she would have been accustomed to wash or iron clothes for six hours on alternate days. It is important that we should add to these qualifications some knowledge of cooking, nursing the sick, and of the management of a dairy.

The habit of cheerfully prosecuting their daily labour, of whatever kind, would certainly have been acquired by every child at

the age of 13. To ensure complete success in this respect, the industrial training is to commence in the infant school, where straw-plaiting, knitting, and sewing will soon be taught.

By setting the children early to work as a part of the moral training of the school, you have announced that you do not intend that the children shall be prepared for some particular handicraft or service, and you do not expect that such instruction is in any case to supersede the necessity for further training when accidentally the employment of the school may have prepared the child for his employment in after-life. You desire only that the education of this class of labourers should havé a direct relation to their condition in life, and you expect that they may be taught the use of various tools, by which they may be enabled to increase the comfort of their households in after-life, without an expenditure of their earnings, or obtain better wages by superior usefulness. That a sailor should have learned at school to make his shoes and mend his clothes, or a labourer know how to cultivate his garden, may be taken as illustrations of the future application of such knowledge, but the instruction of the girls in household work, in frugal cookery, and in domestic management, appears not only essential as a part of moral training, but necessary as filling a lamentable void in the education of young females among the poorer classes. The junction in the early associations of the child of an improvement of the intelligence and of a growth in knowledge with the acquisition of manual skill and of habits of industry, secures the future man from an erroneous view of the duties and rewards of his condition in life and of the true sources of his happiness.

The children are therefore trained in a succession of employments. Thus a boy having learned to plait straw and knit under nine years of age, may learn to make and mend his clothes before he is 11, and to make and mend his shoes before he is 13, and meanwhile he may acquire a knowledge of the naval drill, of a seaman's duties, &c.

All pauper servants and assistants whatsoever should be banished from children's establishments, and no person should be employed in the household whose character and habits are not in every respect unexceptionable. It is of primary importance to secure assistants of cheerful temper, and with habits of kindness to children, and above all, wholly free from those feelings of dependence which are the usual characteristics of paupers.

As soon as the school is organized, and the children have been trained into docility, degrading punishments are to the last degree prejudicial to their moral improvement; all corporeal punishment should at an early period fall into disuse, and the necessity of resorting to punishment of any kind frequently is to be regarded as a proof of the incompetency of the teacher.

In contractors' establishments the removal of these inferior assistants is generally resisted, on account of the expense attending the aid of well-qualified and respectable servants. Without this change it is impossible to introduce into houses in which confusion has existed, such habits of punctuality, cleanliness, and order, as characterise barrack discipline. The eye of a barrack-master must detect innumerable faults arising from the slovenliness which has prevailed in the internal management, and to remove which all expedients are vain without an entire change of servants.

To procure a punctual observance of the hours allotted to rising and going to bed; to prayers, meals, exercises, and school; to secure exact discipline in the movements of the children at these several periods; to preserve uninterrupted decorum in attitude, expression, and manner during the meals and religious services; and to accomplish this without interfering with the operation of those kindly feelings which ought to characterise all the relations of children and their teachers, must be the subject of a continued effort, which is, I hope, in some houses, now crowned with partial success, and which may, by perseverance in the course of a few months, be established as the habit natural to the inclinations of all connected with the training of children in the improved schools.

My experience leads me to say, that the defects apparently inseparable from contractors' establishments, are such as to render their extension in the highest degree impolitic; and to induce me to add, that a right regulation of such houses can generally be secured only by incessant and painful vigilance.

The plan of founding district schools for the training of pauper children on the plan submitted to your approval last year, derives much support from the success which has attended the partial introduction of that plan into Mr. Aubin's school of industry at Norwood, and other district schools for pauper children in the neighbourhood of London.

These improvements have been introduced with a success and to an extent scarcely inferior to that to which Mr. Aubin's school has attained in the Limehouse school of industry of the Stepney Union. The Board of Guardians of the Stepney Union have spared neither personal exertions nor legitimate expense in the improvement of their children's establishment. They have adopted similar arrangements in their schools and workshops; in the instruction, discipline, and exercises of the children; they have erected a mast with a complete suit of sails, and their chairman, Geo. Fred. Young, Esq., who takes the most lively interest in the school, has provided a competent superintendent for the instruction of the mariner's class in seamen's duties. The mariners sleep in hammocks, and are now so practised on the

mast and in the daily performance of the routine of ship duty, that they are preferred by captains of vessels, and easily get good berths at sea.

The Board of Guardians of the Greenwich Union have created a district school at Deptford, which is to be managed on the same principles.

The Board of Guardians of the Edmonton Union are engaged in the alteration of their children's establishment at Enfield, for the adoption of similar arrangements.

The Board of Guardians of the West London Union have manifested much anxiety respecting the management of their schools, which in many important respects are well conducted.

Improvements are in course of adoption by the Boards of Guardians of the Wandsworth and Clapham, and of the Kensington Unions.

The Board of the parish of Bermondsey await the granting of further facilities by the Legislature for the complete adoption of the whole of these arrangements.

The Board of Guardians of the parish of Lambeth are about to apply themselves with vigour to the immediate re-organization of the industrial, moral, and religious training of their pauper children at Norwood.

The local Unions of Surrey are generally desirous to avail themselves at the earliest period of the facilities they expect to be afforded by the Legislature for the creation of district schools.

Mr. Drouett's establishment at Tooting has also undergone some improvement.

Without the aid of Parliament, district schools cannot be established; and, in the expectation that such aid would speedily be given, many of the Boards of Guardians in Middlesex and Surrey have postponed the adoption of improved arrangements for the training of their pauper children, because they are anxious to avail themselves of whatever powers are confided to them by the Legislature to establish schools under the united management of Unions, combined for the purpose of creating a district school. I believe that you have also received from my colleagues, and from Unions in the country, the strongest assurances that unless district schools are created, the training of pauper children must still remain grossly defective and their contamination from association with adult paupers continue a subject of anxiety to all those who have hoped that the amended law would afford the means of preventing the propagation of the hereditary taint of pauperism.

If 100 district schools for the training of pauper children were established in England and Wales, the 50,000 children who are now inmates of workhouses would be separated from the chance of a polluting association with the adult inmates; they would not

be daily taught the lesson of dependence of which the whole apparatus of a workhouse is the symbol; the school management would be unincumbered with the obstructions that it now encounters from the interference of the workhouse routine; and the whole of the moral relations of the district school would assume a character of hopefulness and enterprise better fitted to prepare the children for conflict with the perils and difficulties of a struggle for independence than anything which their present situation affords. No workhouse school as yet affords an example of industrial, moral, and religious training, the success of which can be compared with that which has already attended only six months' exertions in an establishment containing 1,000 children, though those efforts have been obstructed by all the imperfections incident to a contractor's establishment. By assembling a greater number of children in one school, efficient superintendence of the several departments of industry, physical training, and secular and religious instruction, as well as of household management, is reconciled with a due regard to economy. The efficient regulation of small schools is possible, if economical considerations are entirely overlooked; but in the administration of a public trust, which involves not merely the careful use of the means derived from the rate-payers by a compulsory levy, but the recognition of obligations, and the discharge of responsibilities constantly involving the future well-being of 50,000 children, and incidentally affecting the prosperity and happiness of an exceedingly larger portion of the poorer classes, it is gratifying to find that the weightier trust can be most faithfully preserved by means which secure the most economical management of the public funds.

In the training of pauper children, the difficulties arising from differences in religious belief are happily scarcely even incidentally found to operate; and the means adopted for affording them religious instruction apparently obtain universal acquiescence.

I have, &c.

(Signed) JAMES PHILLIPS KAY.

Instructional Letter from the Poor Law Commissioners to the Chaplain of Mr. Aubin's Establishment for Pauper Children at

SIR,

IN appointing you to superintend and to conduct the religious instruction of the pauper children trained in Mr. Aubin's establishment at Norwood, the Poor Law Commissioners are desirous of conveying to you their views respecting the arrangements by which your important services may at the earliest period be rendered most efficient.

The Commissioners do not presume to suggest what course shall be adopted in the inculcation of the essential doctrines of Christianity, a duty arising out of your sacred functions, which they have no doubt you will discharge, as it is their earnest wish you should, so as to be satisfactory to your Diocesan; but they conceive it their duty to make you acquainted with the relation which the religious instruction of these children holds to those peculiarities in their condition attributable to circumstances to which they have been exposed, or which arise out of the design of the institution in which they are placed, as effecting the position they are to occupy in after-life. By attention to such facts, the Commissioners believe your instructions may be in such harmony with the other agencies employed for the moral training of the children, as greatly to increase the efficiency of those means, and, under the blessing of God, to promote the success of your own labours for the moral and religious improvement of the children.

It is important that you should remember that the children are chiefly orphans, or deserted by pauper parents, or illegitimate, and sprung from the most wretched, ignorant, and demoralized portion of the metropolitan population.

Fortunately the majority were of tender age when they were admitted, otherwise their familiarity with scenes of gross intemperance, with the habits and language of dissolute men and women; their habituation to filth, disorder, and violence; the neglect of religious observances, and the practice of positive vices, in which they have been reared, would render almost insuperable the difficulties obstructing all attempts to restore them to the world, cleansed from impurity, and furnished with principles and habits to sustain them in a course of well-doing. Some children will be found so depraved by the continual influence of these circumstances, as to become objects of peculiar solicitude, not merely on account of the efforts required for their own reformation, but the means necessary to prevent their contaminating their associates in the school.

The secular instruction, and the moral and industrial training, adopted in the several departments of the school, are designed to counteract the vicious tendencies already given to the dispositions of the children. The teachers will rear them in habits of industry, cleanliness, punctuality, and order. They will be taught to speak the truth, and trained to be kind to their fellows, to be respectful to their superiors, to preserve whatever is intrusted to them, to be honest and subordinate. They will be informed how they may best secure themselves against the vicissitudes of life, and what are the consequences of vice. Such practical lessons will pervade the secular instruction and the moral training of the school; but it is also desired that the sanctions of religion should be the foundation of this instruction, and that the relation between the present and future condition of the children, the claims which religion has upon their thoughts, and the influence it ought to exert on them in all the practical duties of their lives, in their households, and in society, should be carefully depicted.

The Commissioners are desirous that all other departments of religious instruction should be conducted according to your own sense of the duties of your sacred office; but you will permit them to describe in what way your superintendence may at once be brought into active co-operation with the other expedients adopted for the moral training of the children, by establishing a plan of instruction in which the sanctions of religion may supply the best motives for a discharge of the practical duties of life.

The Commissioners have enjoined that prayer be said every morning and evening in the school. It is not necessary to say that, in order to be useful to children, such a daily service should not occasion weariness; probably the service should not exceed a quarter of an hour, during which a portion of Scripture should be read, a hymn or part of a hymn sung, and a prayer offered. If the verses read be selected (whether from one chapter, or from two or more portions of Scripture), so as to illustrate some one precept or thought, or doctrine, and the hymn be chosen with a view to throw further reflected light on the same idea, which may also pervade the prayer, it is believed, that with due solemnity and kindness of manner, the attention of the children may be aroused and sustained during the service. Sometimes it may be useful that each alternate verse of the brief selection made should be read simultaneously. In order that the hymn may be sung with propriety, the Commissioners have directed the children to be trained in psalmody; and they confide to you the selection of the verses, as also of the hymn and of the prayer. With this view the teachers are directed to await your instructions in this matter.

One hour daily is to be devoted to the reading of the Scriptures in those superior classes of the school which are able to

read fluently in the Old and New Testament. The object of this lesson is, not to improve the children in the art of reading, in which the classes so employed are supposed to have attained considerable proficiency, but to enable the children to attain such a knowledge of the Holy Scriptures as may, in after-life, exercise a practical influence on their thoughts and conduct.

The Commissioners recommend that these lessons be given to classes of 40 or 50 children, arranged at the parallel desks, and that the simultaneous method of instruction be as much as possible adopted, tested by special individual interrogatories, and written answers, both immediate and from memory. This method is commended to your adoption, because the Commissioners entertain a strong conviction that you will find it useful in sustaining the attention of the children, in awakening their sympathies, in calling their feelings into active exercise on the important subjects to which it will be your duty to direct their thoughts, and, in short, in bringing their minds into the closest harmony with your own.

The Commissioners are desirous that you should personally conduct the religious instruction of one class at this hour daily, and that you should give such directions as you may deem necessary to guide the teacher in the instruction of any other class to which it may be desirable that similar instruction should be conveyed at this appointed hour.

Every class, and consequently every child in the school, will thus, at least once every week, have the benefit of your religious instruction, though the children able to read in the Old and New Testament will probably claim a greater portion of your time, because they may be expected to leave the school soon.

The Commissioners further express to you their sense of the importance of regulating the order of reading the Scriptures from day to day, during the appointed hours of religious instruction, by some method which may serve to show the connexion between the historical and prophetic writings of the Old Testament, and the Gospels and Epistles of the New. The great success which has attended the system of biblical instruction conveyed by Mr. Wood, the conductor of the Edinburgh Sessional School, induces the Commissioners to solicit your perusal of his "Account" of that institution, and your special attention to the method adopted in that school in the biblical instruction of the children. The weekly recapitulation of previous lessons appears an important part of the plan pursued by Mr. Wood.

The hour devoted to religious instruction should be punctually observed, care being taken to commence and conclude the lesson precisely at the appointed period. This is necessary, not only for the maintenance of order in the routine of the school generally, but because certain children may, by the provisions of

the 19th section of the Poor Law Amendment Act, be withdrawn from the school during this period; and as it may be convenient to allot this interval to the teaching of such licensed ministers as the parents or natural guardians of such children may appoint for that purpose, greater inconvenience would result from a want of punctuality in this portion of the daily routine than in any other.

If the afternoon were selected for this purpose, you would probably find it desirable to conduct the evening prayer from time to time personally.

The Commissioners wish your attention to be directed to the accomplishment of their desire, that the children who are on alternate days employed in the workshops, should on those days read the Scriptures, either at the hour appointed for religious instruction, or at such other time as may be most convenient.

You will appreciate the propriety of selecting, for the use of the teachers, such forms of grace and thanksgiving at meals as you may consider most suitable to the understanding of the children, and in closest harmony with the design of the establishment. The Commissioners have directed Mr. Aubin to supply a sufficient quantity of Bibles, Testaments, and books of Common Prayer, and they entrust to your direction the steps to be taken for making the children (not withdrawn from your care) acquainted with the Catechism and formularies of the Church.

The master employed to teach the children psalmody has been directed to instruct them in chanting those portions of the ritual directed to be sung, in order that Divine service may be conducted with greater solemnity on Sunday. This, the Commissioners have reason to believe, will obtain your cordial approval.

With respect to the moral and religious state of the household on Sunday, the Commissioners are anxious to require that no work which can be avoided shall be performed on that day in the household, either by the children or servants. Divine service will be conducted by you at a convenient hour, in such a manner as you may conceive most desirable.

The Commissioners perceive how difficult it is to preserve in such an establishment, not merely a proper degree of outward decorum, but to inspire the children with a sense of the importance of the objects to which Sunday is consecrated, without introducing such austerity and gloom or restraint as may impair the permanency of the impressions which are sought to be conveyed. The Commissioners therefore recommend to your especial attention the regulation of the whole routine of the school during that day.

The Commissioners are glad to be informed by you that your discourses are carefully adapted to the capacities of the children, both as respects the nature of the subjects selected, and the

parental manner in which they are treated. Inasmuch as the method you adopt appears well calculated to draw forth the sympathies of the children, and to arouse their feelings in favour of the truth which it is your duty to teach, the Commissioners hope it may be expected that your pastoral care will be more useful than if your method resembled that adapted to the public instruction of adults.

The Commissioners invite your attention to the plans of instruction, and moral and industrial training, pursued under their direction, at the hours not devoted to religious instruction. They are anxious that, by such visits to these departments as your leisure may allow, you should have an opportunity of ascertaining to what subjects the attention of the children is directed during the hours of regular instruction; what are their attainments generally; what means are adopted to rear them in correct moral habits; and what success attends these agencies; in order that you may thus be enabled to acquire such a knowledge of the diurnal domestic occurrences of the school, as may afford you the means of bringing your pastoral labours into constant practical relation with the moral wants and susceptibilities of the children.

Registers of the time each child is employed in the workshops, laundry, or other household work, are kept by their respective superintendents; and the Commissioners hope you may deem it consistent with your other duties to give attention to these registers, in order that no child may be so employed at any other than the appointed period.

In one respect, the Commissioners feel that in establishments in which children are separated from society into an almost conventual seclusion, some risk of failure must be encountered from a want of the habit of self-direction amidst temptations to folly or crime, which habit can only be fully acquired by mixing with society in which the child must ultimately be exposed to such temptations, unless precautionary measures are diligently pursued.

Domestic education frequently fails, because this habit has never been formed; and, it is to be feared that, as society is constituted, no admonitions, how careful and skilful soever they may be, can compensate for the want of means to train a child in the avoidance and resistance of temptations to error.

To the formation of this habit of self-direction, you will find that a large portion of the attention of the teachers is given.

Periods of sickness will, of course, afford you opportunities for impressing the minds of the children with a sense of their religious duties and responsibilities, of which the Commissioners are aware that you will be anxious to avail yourself; and they trust the arrangements of the sick-wards will be such as will afford you the best facilities in this respect.

They have directed the medical officer of the establishment to

keep, in some conspicuous place, a tabular statement, in terms which will enable you, by a reference, to determine what claims the sick-wards have on your attention.

Sliding Date.	Name.	Age.	Class.	Disease.	Intensity marked— S. *i.e.* Sick. D. *i.e.* Dangerously ill. C. *i.e.* Convalescent.

The devout plan pursued by the Church, and in hospitals, and other public institutions, of remembering the sick and afflicted in Divine service on the Sunday, as appointed in the Rubric, will doubtless be observed by you; for, omitting all notice of whatever other claims the practice has on your attention, you will feel how useful is its tendency in bringing children to sympathise in each other's afflictions, whose prospects are so equal, and whose happiness will be so greatly affected by the success or failure of the efforts made for their moral and religious training.

As your acquaintance with individual character becomes more intimate and general, your opportunities of usefulness will be greatly enlarged by such private admonition and encouragement as circumstances may appear to suggest or require.

The Commissioners are desirous that you should obtain from Mr. Aubin, and the teachers in his establishment, the most constant assistance; and to this end they have considered it important to convey to them a copy of this letter, which they have the less hesitation in doing, because they have the means of knowing, that the views which are set forth therein not only will obtain a ready acquiescence from you and them, but that you are personally anxious for more frequent opportunities to carry into execution the method of religious instruction described in this letter.

Signed, by Order of the Board,

E. CHADWICK, *Secretary.*

V.

AN ACCOUNT OF CERTAIN IMPROVEMENTS IN THE TRAINING OF PAUPER CHILDREN, AND ON APPRENTICESHIP IN THE METROPOLITAN UNIONS.

By James Phillips Kay, Esq., M.D., Assistant Poor Law Commissioner, and Secretary to the Committee of Council on Education.

Gentlemen, *December 1st*, 1840.

In the Report which I had the honour to present to you on the 1st of May, 1839, and which was published in your Fifth Annual Report, I described the steps which had been taken, with your sanction, for the improvement of the training of pauper children in the metropolitan district, and particularly in the establishment at Norwood belonging to Mr. Aubin, in which the pauper children of several metropolitan Unions are maintained under contracts with the Boards of Guardians of those Unions.

The arrangements of this school have been maintained in the same condition as that described in my Report of the 1st of May, 1839. No material change has occurred in the organization. The very defective character of the buildings still remains a formidable obstacle to certain changes in the discipline and management of the school which you deemed desirable at the commencement of all attempts to improve the training of the children. On the one hand, Mr. Aubin's contract did not appear to him to afford the means of making the large outlay required for the erection of efficient school-rooms, on the plan which was furnished to him for that purpose; and every effort to procure funds from other quarters was baffled, because those funds would have been contributed to an individual, with little or no security for their permanent appropriation to the education of the children of the poor.

To these obvious impediments must be added the obstructions, arising from the absence of the daily and hourly control of a superior intelligence (acquainted with the discipline of schools,

and the best orphan-houses) over the whole details of the establishment, by which the personal interests of the contractor might be at all times reconciled with the interests of the public.

As far as the teachers and servants are concerned, this evil is now to a considerable extent remedied by the more constant superintendence which the chaplain (the Rev. Joseph Brown), in addition to his other important duties, is enabled to bestow on the punctual attendance and persevering activity of the several officers, and on the maintenance of harmonious co-operation among them, since he has relinquished his superintendence of two other children's establishments, and confined his attention solely to that at Norwood. The chaplain's aid in the selection of servants and nurses, in a vigilant inspection of their moral conduct, and their deportment towards the children, has been of great importance to the establishment; has remedied several defects; and affords the Boards of Guardians one of the best safeguards against abuses. I deem it only just to Mr. Aubin to state, that he has lent his aid to a progressive, though gradual improvement of many of the arrangements of his establishment; and that he has rendered it more worthy of the confidence of the public than at any former period.

Though, therefore, I cannot withdraw the opinion which I expressed in my Second Report on the Training of Pauper Children (Fifth Report, p. 158) concerning contractors' establishments generally, I have deemed it my duty to encourage the Boards of Guardians of the metropolis to afford Mr. Aubin a somewhat larger remuneration for the maintenance, clothing, and training of their pauper children in his establishment, both on account of the recent great increase in the prices of provisions, and the considerable outlay and annual expense which he has incurred in the improvement of his schools. Mr. Aubin now receives 4*s*. 6*d*. per week for the food, clothing, lodging, and training of the pauper children committed to his care, and he is required to send the children to service decently clad.

But with respect to contractors' establishments generally, I now repeat that "the defects apparently inseparable from contractors' establishments are such as to render their extension in the highest degree impolitic; and to induce me to add, that a right regulation of such houses can generally be secured only by incessant and painful vigilance." (Fifth Report, p. 158.)

I have accordingly communicated my objections to such establishments to the guardians, and with respect to certain of them I have considered it my duty to warn some boards not to send any child to them, and to call on other boards to make new arrangements as early as possible, and to withdraw their children from them. Such boards await the assistance of the Legislature to legalize combinations of Unions for the support of District

schools. Mr. Aubin has certainly earned a title to protection and encouragement, but I think his establishment ought not to be enlarged.

The school at Norwood remains in the same condition as that described in my Second Report. (1st May, 1839, Fifth Report, p. 145 to 160.) The elements for the improvement of the school were not easily accessible, and though it has obtained the approval of many distinguished individuals, that approval, like your own, must rather be regarded as resting on the general scope of the design of the school than on all the details of the execution of that design which necessarily fall short, both in the method and the matter of instruction, of what you would have been desirous to accomplish if you had been assisted by a normal school, under your own direction, for the training of your teachers.

On the one hand, the monitorial system or method of mutual instruction appeared little adapted to the management of a school of the most wretched, ignorant, and debased children (as the pauper children of a great city like London must necessarily be), because the monitors themselves must partake, more or less, of the characteristics of the class from which they are selected. Moreover, it had been tried, and had failed in its special application to this school, before you attempted the improvement of the school:—

1st. On account of the exceedingly short period during which the children, on the average, remain in the school; viz., less than a year on the whole average, and not more than a year and a half, excluding a large number of those admitted for the shortest period.

2ndly. On account of the tender age of the majority of the children.

3rdly. On account of the want of adequate means for the separate instruction of the monitors.

But, on the other hand, the training of pupil teachers within the school must necessarily be a work of considerable time; will require some sacrifices on the part of individual Boards of Guardians; and will after all furnish a class of pupil teachers, inferior to what might be obtained, in a school where the children are not physically, and therefore mentally degenerate.

Mr. Aubin has, under your directions, taken the first steps towards the apprenticeship of some of the best conducted and most advanced boys as pupil teachers. If he be enabled, by the Boards of Guardians, to carry into execution this plan of retaining by apprenticeship some of the most promising children in the school; rearing them in the constant practice of the duties of teachers; and preparing them, by separate instruction every evening, for that vocation, he will be enabled gradually to establish his school on the sure basis of the "*mixed method of instruction*"—

the characteristics of which it has hitherto only partially and imperfectly attained.

Mr. Aubin's first attention should therefore be steadily directed, *to rearing up* within the school a body of well instructed pupil teachers, to assist the teachers in the general duties of the school. This, however, he has hitherto failed to accomplish; but I trust that arrangements which have recently been made will ensure the attainment of this advantage.

The introduction of greater precision in the methods of instruction, and the assimilation of those methods to the most approved forms, will necessarily depend on the degree of skill which the Pupil-Teachers attain, and on the amount of assistance which they are enabled to afford the Teachers.

All progress in the introduction of correct methods must necessarily be slow, and subject to frequent embarrassments under existing circumstances.

Arrangements are in progress for the introduction of the Phonic method of teaching to read into the infant school, and among the least instructed children in the boys' school, who arrive at too late an age to enter the infants' school. Mulhauser's method of instruction in writing is likewise about to be placed in the hands of the teachers, and will probably soon be in operation.

The method of instruction in linear drawing, from models invented by Mr. Dupuis, will be introduced as soon as the proper agency can be found, and copies of the models made for that purpose.

The Pestalozzian method of instruction in fractional arithmetic, which forms one of the most striking characteristics of the Swiss and Dutch schools, and has been many years practised with success in the schools of the Kildare-place Society, Dublin, will be adopted as soon as the teachers have had time to make themselves acquainted with its details.

The method of instruction in singing, published for the use of elementary schools by the Committee of Council on Education, is in course of introduction.

These, and some minor improvements, appear to be all which in the present state of the arrangements can prudently be undertaken, or for which the necessary books and apparatus can be found in this country.

The skilful use of these methods must, indeed, depend chiefly on the skill imparted by schools for the training of teachers, and the introduction of other improvements must be postponed till proper manuals of method, and lesson-books of a superior character to any which are at present in existence are published. At the best, such methods must now be practised in various degrees of imperfection, and their full development cannot be attained, while training schools conducted by adepts, instructed by the experience of Europe, do not exist.

The general design of the school is that for which alone you can be held responsible, as long as you do not possess the aid of a training school for teachers—manuals of method and lesson-books which you can in all respects approve—and, especially, while the school is not immediately under your control, but subject only to your indirect influence, with imperfect means on the part of the contractor, to carry into execution your wishes. So long as these circumstances continue unaltered, this school may continue to present a bold outline of your views on the training of pauper children, but that outline must necessarily be rude and imperfect.

These supplementary remarks on the contractor's establishment for the training of pauper children at Norwood will probably be admitted as a sufficient reply to your circular of the 3rd of February, 1840, respecting that school. I trust that I may also be permitted to refer generally, to my previous reports on the state of the training of pauper children in the London district, and to such evidence as will be found mixed up with the main question, to which I desire to draw your attention in this report, for an account of the condition of the workhouse schools of the metropolis, previously to the passing of the Poor Law Amendment Act, and since that period, and for answers to the several questions contained in your circular. These subjects will probably be sufficiently elucidated, while I proceed to examine the questions suggested in the following paragraph in your letter dated 3rd February, 1840. "The results of an improvement in the education of the children may be in some degree estimated, by the diminution of the frequency or total discontinuance of the apprenticeship of pauper children. You are therefore requested to state to what classes the children in the workhouses of your district belong, arranged under the heads of the subjoined table; at what age the children generally leave the workhouse; to what occupations they are commonly sent; what is the outfit in clothes given to an orphan or friendless child; whether any and what premium is granted; or if any subsequent aid in clothes is afforded; whether the children frequently return from service to the workhouses, and what is known of their general conduct and character after leaving the workhouse."

The apprenticeship of pauper children (as I had observed it in the Incorporated Hundreds of Suffolk and Norfolk) formed the subject of a report, which I had the honour to present to you on the 30th of June, 1836, and which was published in the Second Annual Report of the Commissioners. (p. 143.)

From the evidence submitted in that report I was led to the following general conclusions, (p. 183.) "The maintenance, clothing, lodging, and training in a useful calling of the children of the poor, is a responsibility naturally devolving on the parents with

which it is mischievous to interfere. The transference of this responsibility from the parents to the public, encourages premature and improvident marriages, tends to diminish the natural affections, by making the parents cease to be the sources of the well-being of their offspring, and increases the tendency of the poor to rely upon the public for the support of their families rather than to resort to their own exertions.

"The apprentice system has been an injury to the children whom it was intended to benefit; since the care which an Incorporated Hundred can take of the comfort and improvement of its apprentices is less than a parent would naturally exercise over the well-being of his child. The children placed under the guardianship of the public have descended to a *lower moral and social condition*, than would have been their lot if the parents had performed their natural duties.

"To substitute the guardianship of the public for the guardianship of parents is therefore mischievous, and can only be resorted to when the parental guardianship is brought to an end: as for example, when on the death of one parent, the other is an idiot or lunatic, or is convicted of some offence against the laws depriving him of liberty for a series of years; or is transported beyond the seas; or has absconded and cannot be found, and the family are consequently chargeable to the parish; or when both parents are thus circumstanced, provided there be no other relatives, liable under the 43d of Elizabeth, to provide for the support and education of the children, in which case the guardians of the poor are bound to enforce the performance of the legal duties of such relatives towards the children.

"The public becomes the guardian of orphans who have no relatives liable to provide for their maintenance and instruction.

"I beg to suggest that the Poor Law Commissioners require an annual return of the names and various circumstances of the condition of all children included in the above-mentioned classes, who are chargeable to any parish or Union.

"That they should require that children whose natural guardians are totally incapacitated from making provision for their maintenance and instruction, be put to some useful occupation *by the mode of hiring and service without premium.*"

In this respect, I propose to examine how far the improvements which have been introduced into certain of the pauper children's establishments, and some of the workhouse schools of the metropolis, have enabled the guardians to adopt and carry into successful operation the principles affirmed in those conclusions.

In my Report on the 1st of May, 1839, I stated generally that such improvements were in progress, under my superintendence, and I enumerated the Boards of Guardians, which had given the most effectual aid in the accomplishment of the plans I was

desirous to promote. The evidence contained in this Report will describe in detail the arrangements made and the success which has attended them.

The Boards of Guardians of the Stepney Union adopted, at an early period, the views respecting the training of pauper children which have been expounded in your reports, and proceeded with zeal to carry them into execution. The attention of the chairman of the Union, George Frederic Young, Esq., and the visiting committee to the whole of the details of the pauper children's establishment at Limehouse has been unremitted, and the guardians have had the good fortune to be aided by a master of the children's workhouse, and a schoolmaster and schoolmistress, who have co-operated harmoniously with each other, and have been sustained in their labours by religion and zeal for education.

The arrangements adopted in the Stepney Union will be found to be minutely described in the evidence given by those officers.

The Board of Guardians of the West London Union have, from the commencement of the Union, found able and intelligent advisers among their own body, who, before I was called to the London district, had commenced the arduous task of the reformation of their workhouse schools.

The guardians have progressively ameliorated the condition of their pauper children by the choice of a humane and intelligent schoolmaster; the introduction of improved means of instruction; and ultimately, by the removal of the children to a house in the country, where they are separated from the contaminating influence of the paupers assembled in the London workhouse.

The progressive stages of these improvements, which are still incomplete, are described in the evidence of Mr. Green. The Board of Guardians of the Edmonton Union have improved a district workhouse at Enfield, at considerable expense, so as to render the building very complete in all its details, as a house for the training of pauper children. They have separated the children from the adult paupers, and are proceeding with the improvement of the instruction of the children in religion and industry. The Board of Guardians of the parish of Lambeth have selected a very intelligent schoolmaster and assistant master, who have greatly improved the boy's school at their well-conducted children's establishment at Norwood.

They have likewise contracted for the erection of new school-rooms and a master's house, and, as soon as these arrangements are finished, will possess a better arranged school-room than any other Board of Guardians in the neighbourhood of London; and, I have little doubt, that the zeal of the officers of the establishment will render it very efficient in the training of pauper children.

The Board of Guardians of the Greenwich Union separated

their children from the adult paupers, and maintained them in a workhouse at Deptford, under the humane and intelligent management of Mr. and Mrs. Dunlop. The condition of the children when they first came under the care of Mr. and Mrs. Dunlop, and their gradual but cheering progress from a state of brutish insubordination and ignorance, to docility and intelligence, are described in the evidence of Mr. Dunlop.

The children have recently been removed to the capacious wards and yards of the new workhouse of the Greenwich Union, where I have no doubt the public spirit which has prompted the guardians in the selection of the plans, and in determining the internal arrangements of the Union workhouse, will lead them to seek to render their workhouse schools models of good order and judicious training.

Improvements of subordinate importance have been introduced into the workhouse schools of several other Unions, the relation of which, however, is not necessary as an introduction to the following evidence on the subject of pauper apprenticeship in London.

The evidence which follows is taken from some of the most respectable relieving officers, schoolmasters, masters of workhouses, and clerks of the Metropolitan Unions. This evidence illustrates the following topics:—

1st. The consequences of the absence of any restraint on the apprenticeship of parish poor children to the weavers of Spitalfields, and to low tradesmen.

2nd. The condition of parish poor children in the old workhouses when mixed with adult paupers, and when uneducated, or taught by paupers.

3rd. The consequences arising from this grievous neglect.

4th. The effect of apprenticeship with premiums, as a remedy for the neglect of the education of the children.

5th. The combined influence of the neglect of the education of parish poor children, and of apprenticeship with premiums.

6th. The improved arrangements for the training of parish poor children in religion and industry.

7th. The effects of this education in religion and industry on the facility with which parish poor children are put to service, without premium or apprenticeship, and on their power of retaining their places in service by rendering themselves useful to their employers.

8th. The consequences, as respects the ages of the children who are now in the workhouse schools, and their character and efficiency as candidates for service, together with the nature of the trades and employments to which they are put by the Guardians of the poor.

I have not, however, thought it desirable to arrange the evidence on each of these topics under separate heads, but, having

enumerated the subjects which are illustrated by the evidence, to give that which relates to each Union separately, but in such order as may afford the reader the best means of understanding the relations of the several parts of the whole subject. Nor do I think it necessary to interrupt the narrative so arranged by any other interlocutory remarks than those which will be found in the questions addressed to the witnesses.

I shall reserve for the conclusion of the evidence such general observations as appear to me to be suggested by it.

Mr. Charles Alexander Christy, examined.

Dr. Kay.—You are a relieving officer of the parish of Bethnal Green, and have found it necessary to oppose the binding of parish poor children as apprentices to Spitalfields weavers?—I am. I commenced in the year 1834 to keep an account of the children who were apprenticed from other parishes into the parish of Bethnal Green. I find that in the year 1835, 78 children were apprenticed in our parish from other parishes, and 15 only successfully opposed out of 93. In 1836 there were 51, out of which 15 were successfully opposed. In 1837 there were 55 notices, and I successfully opposed 9. Since 1837 we have not received more than 15 or 20 notices.

Have you successfully opposed all those cases in which you have considered the apprenticeship an injury to the child?—Generally at the police offices, but not in many other places; for instance, in the Strand Union they have magistrates sit who are members of their board, and they will scarcely hear any opposition which you have to offer. At Westminster, the magistrates of the Sanctuary, not being police magistrates, have bound pauper children, notwithstanding the applications have been opposed.

Do you think it desirable that any children should in future be apprenticed to the trade of hand-loom weaving?—Certainly not.

Is not the parent's inducement to employ his child in assisting him in the processes subordinate to weaving, more than sufficient to occasion a surplus quantity of workmen in the trade?—Certainly it is.

Therefore, if the parishes are permitted to give premiums for the apprenticeship of pauper children in Spitalfields, that must tend to increase the superabundance of labour in the hand-loom weaving trade; to increase the distress of the Spitalfields weavers; to burthen the parish of Bethnal Green with paupers; and to occasion the misery and consequent misconduct of the children so apprenticed?—Certainly.

What is the inducement on the part of the weavers to take the children?—The premium. I have known them to go for miles to obtain the largest premium. The largest I ever heard was a

child bound from Ipswich with 20*l.* premium to a weaver, a middling working man; a man of character as a working man. I have known many a weaver to go to Richmond for 10*l.* premium with an apprentice, and generally it is the custom of the weavers to go abroad to procure premiums with apprentices. One source of the maintenance of the Spitalfields weavers is the premiums they acquire with apprentices from other parishes.

Have the children so apprenticed generally worked out their time?—I should hardly say one half.

What has become of them?—Generally the master becomes poor and not able to maintain them, then they are discharged and taken into the workhouse; then they are probably not able to get their living, though they have served three or four years, and in consequence they either go vagabondizing about, or go to work at what they call journey work.

Are girls ever so apprenticed?—Many.

What becomes of the girls?—I am sorry to say many of them turn out loose characters upon the streets. I have known some good and virtuous housewives.

If there were no premiums given by the parishes, would the weavers be eager to obtain apprentices?—I am quite certain they would not take any: instead of going abroad to seek them, they would not take them if they were offered.

I understand you to mean that the weavers, pressed by want, or for some debt, incurred either from the depression of trade and consequent want of employment, or from their own improvidence and misconduct, and having no prospect of being able to liquidate this debt by their own regular exertions, have been accustomed to seek relief for their necessities by taking children with whom they received a premium?—I have known many instances; and one remarkable example is contained in the paper which I hold in my hand; it is as follows:—

"Marlborough Street.

"The parish of Saint George, Hanover Square, sent a boy before Mr. Conant and Lord Montford for the purpose of having him bound to a Bethnal Green weaver.

"Mr. Christy, relieving overseer of that district, attended to oppose the binding. Before stating special objections, Mr. Christy said he was charged with a message from Messrs. Codd and Groves, the Worship-street magistrates, to the sitting magistrates of Marlborough-street office, to the effect that they had come to the determination not to bind to any person following the occupation of a weaver.

"*Mr. Conant* remarked, that all he could say in reply to the message was, that he found nothing in the Act of Parliament

which prohibited weavers from taking apprentices, and therefore he did not see how he could refuse to bind in cases where no reasonable objection could be produced.

" *Mr. Christy* said that the binding a boy to a weaver was tantamount to apprenticing the boy to the trade of a pauper. The weavers, in the same station as the present applicant, had no business with apprentices as they could hardly keep themselves, and they had no means of teaching the boys their business, or affording them subsistence and accommodation during the term of their apprenticeship. In fact such was the distress in Spitalfields that nine out of ten cases on the parish books were weavers.

" *Mr. Conant* said he could not listen to any such sweeping objection. If nothing could be alleged against the boy's master, he should not refuse to sign the indentures.

" *Mr. Christy* remarked, that if the magistrates did sign the indentures, he should, he had no doubt, in six months have to apply to the Worship-street magistrates to have them cancelled, for he was quite satisfied that the man had no means of doing justice to an apprentice.

" *Lord Montford* observed that it was improper on the part of the overseer to hold out such language by way of threat to the bench.

" *Mr. Christy* replied that he did not mean his observations to contain a threat. He was well acquainted with the nature of the subject, and it was out of charity and kindness to the poor boy that he spoke. He considered, that in his station he was a sort of guardian to the parish apprentices; and as his parish was filled with instances of poverty and misery, occasioned in a great degree by the loose method in which the system of putting out apprentices had been acted upon, it was his duty to stop the evil as far as his power extended.

" *Mr. Conant* said, that magistrates had no business to take into consideration the necessities of parishes, or the amount of pauperism in them, when they were called upon in matters of apprenticeship. All they had legally to do was, to see that there was no moral stain on the master's character; that he had means to support his apprentice, and facilities for teaching him his business.

" *Mr. Christy* replied, that he knew of nothing against the master's morality. He knew the master could not afford, out of his scanty and precarious earnings (though at present in full work) to keep an apprentice, or to teach him his business. The man occupied a weaver's house,—three little rooms, at the rent of 4*s*. a-week. One of the rooms had in it two looms; the other two were required for the accommodation of the master's family,

and his mother, who lived with him. The only place, therefore, for the apprentice to sleep was under one of the looms.

"The master said that he had bought the boy a bed.

"The boy admitted that he had slept all the trial month on the floor, but that he had been very comfortable. His master had also set him to attempt some part of the weaving work.

"*Lord Montford* remarked, that the boy seemed quite satisfied with his business.

"*Mr. Christy* said, the little boy spoke from want of experience. He did not know of the misery and starvation in store for him, or he would not speak as he did.

"The bench, however, were of opinion that there existed no valid objection against the binding; but, at the request of Mr. Christy, they allowed the indentures to stand over for a day, in order to receive the report of the officers of St. George's parish, as to the means of accommodation possessed by the master."

Next day's hearing of the case.

"The case of the binding of a parish boy to a weaver, opposed by the parish of Bethnal Green, on the general ground, that the trade was too much depressed to allow of those at present in it obtaining a sufficient maintenance, came on before Mr. Chambers.

"*Mr. Christy*, on the part of the parish of Bethnal Green, said, he wished it to be understood that there was not the least objection against the master personally; the opposition was entirely founded on the well-known fact, that a large and an increasing portion of the operative weavers were in the situation of paupers. As a practical man, and one well acquainted with the situation of the weavers, he was quite satisfied that although the boy might experience kind treatment, and even learn his business, yet that he never would be able, when out of his time, to earn sufficient at his trade to support him without parish aid. If any proof were wanted of the distressed situation of the weavers, he had only to refer to his parish; and if required, within a very short time, he would produce hundreds of starving weavers, and good workmen too, who were unable to obtain employment; and who, in consequence, were obliged to resort to the parish funds. The parish of Bethnal Green was constantly called upon to act in cases of binding, and to get the indentures cancelled, on the ground that the masters were unable to support the boys. Out of every twelve of such bindings, he was satisfied proof could be brought forward that six or eight were thus disposed of. In fact, a recent binding from Marlborough-street office, where there was apparently every prospect of a maintenance for the apprentice,

had been cancelled in consequence of the master losing his work. The subject had attracted the attention of the Poor Law Commissioners, and the parish boards of the weaving districts had come to a resolution to check this growing source of pauperism.

"Another overseer of the same parish said, such was the distress at present existing amongst weavers, that the Adelaide fund was nearly exhausted in the attempt to relieve permanently the necessities of the applicants.

"*Mr. Christy* said, if any evidence were wanting to confirm this statement, he need only state, that one of the most respectable and humane of the manufacturers, Mr. T. Wilson, of Spital-square, had discharged upwards of 600 persons from his employ. The fact was, the weaving trade was leaving Spitalfields very fast.

"*Mr. Chambers* remarked, that the trade would naturally find its way to those districts where it could be put in operation at the cheapest rate. The silk trade was finding its way to the north of England, and for this reason, that there persons could get coals at 5*s.* a ton, which in London cost them 30*s.*

"*Mr. Chambers* asked the master what his earnings were?

"The master replied that when in very good work his earnings were from 4*s.* to 5*s.* a-day.

"*Mr. Christy* intimated his disbelief in the accuracy of this statement, but even admitting it to be true, what had the master to do before he could even obtain this sum? He must toil worse than a slave; he must be at his loom by 5 in the morning, and not leave it before 8 or 10 at night.

"*Mr. Chambers.* Between 15 and 17 hours incessant labour, but with the certainty of not being able to advance any higher; while, on the other hand, if the same number of hours were devoted to study, an individual might stand a chance of becoming Lord Chancellor of England.

"*Mr. Christy.* In Bethnal Green parish a bell is rung at 5 o'clock in the morning to call the weavers to their looms, and at 8 o'clock at night, if you go through the place, it appears illuminated, from the number of workshops in which the weavers are still pursuing their labours.

"*Mr. Chambers.* With such strong facts before me, I shall certainly pause before I give my signature to these indentures; but as the case was before Mr. Conant, I must request you to wait until my brother magistrate comes to the office.

"*Mr. Chambers* then referred to the message brought by Mr. Christy to the magistrates of this office from the Worship-street magistrates, and gave it as his opinion that the better course in future would be for the Worship-street magistrates, or Board of the Union, to send round to other magistrates circulars when any particular time of depression existed amongst the weavers, to

serve as a guide to them when to withhold their signatures to parish bindings.

"*Mr. Conant* having taken his seat on the bench,—

"*Mr. Chambers* asked if he, having been put in possession of the fact of the impossibility of the present number of weavers obtaining work, that the manufacturers had recently discharged 600, that the Adelaide fund was nearly exhausted, and that a large proportion of pauper applicants were weavers, would Mr. Conant think it advisable to allow the boy to be bound.

"*Mr. Conant* replied that it was too late to take into consideration these matters, the indentures having already been signed by himself and Lord Montford the previous day. Lord Montford and himself had been of opinion that they, as magistrates, had no business to consider general matters relating to the state of the trade, but that if no objection against the capability, the means, and the moral character of the master were established, the bench ought to sign the indentures. Conditionally, therefore, that the boy was provided with a bedstead to sleep upon, the indentures had been signed.

"The magistrates having received assurances that a bedstead had been bought, Mr. Conant directed the indentures to be handed over to the master.

"*Mr. Christy*, before leaving the office, begged to apologize for any expression which might have fallen from him on the previous day, he having had no other object in view than a faithful discharge of the duties of his office."

The master of the boy alluded to in this paper has since applied to the parish for relief, and received relief for one month, and in consequence of the master being unable to maintain the boy, he has been assigned over to another master, and fortunately has obtained a more respectable employer, who will make him master of his trade.

The next case to which I desire to draw your attention is that of a man named William Cluff, who had four apprentices from St. Dunstan's, in the city of London, three boys and a girl, all of whom having been bound for seven years, served only about three years of their apprenticeship, and were turned upon the hands of the parish. The parish of St. Dunstan have a private charity that they bind children from. They are not called upon to give the parish officers notice. It is called Bloomfield's charity. It is 10*l.* premium with each child. One of these boys I believe to be in the Isle of Wight for thieving, and two are placed with other masters, and the girl died in our workhouse of exhaustion, said to have arisen from ill treatment from her master, from whom she had been discharged. The treatment of these children was scandalously cruel. They were not employed in weaving,

but in tending cows at a cow-shed. The children were scandalously beaten, so much so that they were taken before the magistrate, and the master was punished on two occasions.

There is another case of a girl being apprenticed to a man named John Row. He likewise had a premium of 10*l.* with her; she served him 12 months, and then she was turned upon the hands of the parish. His family is now in the workhouse, he absconded and deserted them. Emma Macdonald was a girl bound apprentice by the parish of Bermondsey. In consequence of the depressed state of trade the master applied to the magistrates, and told them he was unable to keep his apprentice; she was discharged and received into the workhouse, a place was got for her in service, she kept it about two months, and then went upon the streets. The consequence was she got mixed with passers of bad money, she was sent to the House of Correction, and whilst lying there she was confined of a child. When she came out she had recourse to prostitution again, and is now in our workhouse with another child, making two children.

There are other trades besides weaving which apply for apprentices in our parish, in which the motives of the applicants are quite as low, and the conduct to the children quite as bad. A man of the name of Moses, a Jew glass-cutter, has had several apprentices from various parishes with large premiums. They will not go where the Act of Parliament has given the 4*l.* 2*s.*; they select others on account of the extent of premium given. That man has had three apprentices, and they have been all discharged for his bad treatment of them, and now that man himself is a pauper upon Spitalfields parish.

There is a trade of making lint for the dispensaries, which I think also quite as bad as that of the weavers. I can give you a case of three persons bound to aged persons, whom I did not conceive were fitted to take apprentices, they having had ten. Mark Constance received Maria Sheaf, James Hayton, and Jemima Crump, each of the age of ten years, from the parish of St. Pancras. I opposed the binding on the ground of their being aged persons, and having ten apprentices. The case was adjourned for a fortnight. I attended again October the 8th, when the objection was over-ruled by Messrs. Rogers and Bennett, and the result of this apprenticeship was, that two of the children have been since discharged for showing a bad disposition, and taken to the workhouse. One was put out, and one still remains: she will not retain any place got for her. Another case is the case of Sarah Hart, aged twelve years, who was apprenticed to Randall Bradley, a Spitalfields weaver. She was bound apprentice on August 8th, 1835, and discharged November 5th following. She remained in the workhouse for some time, and got a place, and she keeps her place in servitude. I give this, merely as showing that the

masters take apprentices for the premiums, and get rid of the apprentices as soon as they can. I could state a great many other instances of the same kind. I remember a case of a man named Clarke, a weaver, having an apprentice from Bermondsey. The boy turned out a very dull boy, and the master found it a burthen upon him to keep the apprentice, and he applied two or three times for his discharge, and ineffectually. I opposed the application before the magistrates. The master placed, as it was proved afterwards, a handkerchief in the boy's way; the boy went out one morning and took it, and tied it round his neck. The master sent a policeman after the boy: he was taken up before the magistrates; and the magistrates saw the case so clearly and distinctly, and that the man was not a fit man to have the apprentice with him any longer, seeing that he would put things in the boy's way to cause him to do improper acts, that they discharged him. The boy is now in our workhouse. The master had applied to the Board of Guardians on two or three occasions for their assistance to procure the discharge of the boy; and on the refusal of the Board of Guardians to concur in his application, he, on leaving the room, said, "I will take care that you shall have the boy before long."

Do the parish apprentices ever run away from their masters? —Yes, they do; and we frequently incur considerable expenses in consequence of their being found destitute in remote parishes, and being passed home to our parish, instead of being sent back to their masters. I remember particularly the case of a girl of the name of Starkie, apprenticed to one of our weavers. A disagreement took place, and she ran away, and was passed home to us at an expense of 10*s.* 6*d.* She ran away a second time, and a second time we were put to the expense of having her passed home. She has recently run away a third time, and we have been put to similar expense. There is another, a very recent instance, I remember, of a girl removed home to Bethnal Green, under a suspended order of removal, with a child, who had run away from her master, to whom she was apprenticed. She is only 19 years of age, and her apprenticeship is not yet expired.

Do the masters, when the apprentices have worked out their time, generally concern themselves much about their future welfare?—Very few instances of that have ever come under my notice. I have known some. There are females in the parish who engage a considerable number of apprentices to assist them in tambouring. They, like the rest, go to a distance for the apprentices in order to obtain the premiums, and, as soon as their time is expired (if they work out their time), instead of employing them at wages, they turn them adrift, and seek other apprentices. The same occurs with the lint makers.

Mr. Francis Beston, examined.

Dr. Kay.—You are relieving officer of the parish of Bethnal Green?—I am.

And have occasionally been required to examine the cases of applications for apprentices from other parishes by weavers in your parish?—Yes; one case particularly strikes me, in which my colleague had endeavoured, by all the means he could, to oppose, unfortunately unsuccessfully. The application was to bind a boy. Notice having been given to our parish by the Strand Union, Mr. Christy visited the case, and found the accommodation was so wretchedly bad that he opposed the binding. The binding was to take place in a room at the then Strand Union house. The case was postponed for a week, and in the mean time Mr. Christy requested me to see the place in which the boy was to be bound. I found it in one of the lowest and worst streets of the parish, where we have as much fever and disease as in any part of the parish, where there is no drainage, no sewer, nor anything of the kind, and where, consequently, much disease is generated. The application was from a man calling himself a smith; but in fact his business was not anything more than making little penny, twopenny, threepenny, and sixpenny fire-shovels, and sending his wife and some part of his children out to sell them in the streets—to hawk them about. I called the boy up from an underground cellar, in which he was at work, and questioned him whether there was any relationship existing. To the best of my recollection, the boy was a nephew to the mistress's brother. I asked him some questions to which he replied he was perfectly satisfied with his situation. I asked to see the bed in which he slept. I was taken into the only room above. There was just an underground cellar, a floor to live in, and room above it. I found the master's bed in the same room with the boy's. The master, his wife, and his family too, slept in one bed, and this boy in another. I think that the master had three children. I went down stairs and brought the boy up with me. I placed my hand upon the head of the boy, and with my handkerchief measured the height of the boy, and said, it is impossible for the boy to sleep in this bed; it is shorter than the boy is. I turned down the bed-clothes: there was an upper sheet, but not one for the bottom; and I believe that was merely put there supposing we should call to see it. I then suggested to the man whether it was not probable that the premium would be of more use than the boy. He said, "No; the boy would rather be with him than in the Strand Union, because he liked to be with a relation." I returned and represented this to Mr. Christy, who had instructions to oppose this binding to the utmost of his ability, and I have reason to believe he did so. This was probably two years ago.

The boy, however, was bound to that place; and I have seen the boy in the same street, without shoe or stocking, standing in the street to sell these shovels.—Another case strikes my mind, in which my colleague called upon me to see a woman who took a number of apprentices in the tambouring line. Interference was obliged to be had recourse to, in consequence of the neglect of the apprentices on the part of their mistress. I cannot say as to the number, but several of them were most dreadfully eaten up with the itch. A long discussion upon that occasion ensued, whether the children should not have the indentures cancelled, and the parish take the burthen of them, rather than that they should be permitted to remain with the woman. Ultimately better accommodation was made, and I think they were not discharged. I have seen instances during my visit, in some of the most dreadful scenes of misery, where there have been apprentices living, eating, drinking, and sleeping with the families of these men; there being scarcely accommodation for the family itself without the apprentices.

Generally that is the tenour of your evidence?—Yes it is. Our own Board of Guardians have come to a positive determination to bind no children to weavers either in our own or other parishes; and a case very recently occurred of binding one of our boys to a weaver in the parish of St. Leonard's, Shoreditch; but, though the respectability of the weaver was attested by my colleague, Mr. Christy, the Board of Guardians refused to bind him.

Mr. Henry Green examined by *Dr. Kay*.

You have been schoolmaster of the school belonging to the West London Union for some time?—For two years and a quarter.

Will you state the condition of the children mentally and morally, at the period when you first undertook the duties of your office?—With the exception of the children from one parish out of the seven, they had almost no learning; a few of them could read, and a still smaller number of them could write. In the most populous parish they lived together with very little superintendence. The stronger tyrannized over the weaker to a frightful extent. They had in almost all instances been mixed with the adult paupers in the parochial workhouses; their language consequently was very bad; their manners exceedingly coarse and rude; several of them had broken out at times from the workhouse, had become thieves, had been convicted, and then came back to the workhouse; they had contracted habits of petty thieving generally, and lying and deceit. When the Union was first formed, they robbed the relieving officer; they broke into his office, got his cash, took out his money, and made their

escape over a wall; and there is a boy amongst us now who at that time was the butt of the rest of the pauper boys. Their amusement was to open the window, and to beat him till he jumped out and ran away. According to their own reckoning, they had forced him by cruelty to abscond from the workhouse thirteen times. The children were quite reckless about the property of the house; their forms, and bedding, and utensils were all wantonly misused and destroyed.

What was the effect of those habits on the facility of procuring them places in service, and on their retaining those places after they were procured?—At that time there appeared to be great difficulty in procuring situations for them at all, and they frequently returned of their own accord, or were returned by their masters to us. The principal means of getting rid of them ultimately, being handing them over to a crimp, who got them on board ships, principally in the fishing trade. The character of the persons to whom they were apprenticed was generally very low, being for the most part journeymen mechanics in various low handicraft employments. I do not think the children were generally well treated by those workmen to whom they were apprenticed, and probably they often provoked maltreatment.

Seeing that there was considerable difficulty in procuring situations for the children; that it was almost impossible to procure them situations with respectable tradesmen; and that by their own misconduct, and the mal-treatment of their masters, they frequently absconded and were returned to the house,—are you of opinion that some of them might be consequently driven to vicious courses on account of the failure of the attempt to settle them in employment?—That was mainly the result. After trying one or two situations and being returned (thus getting them into ill repute with the guardians and with their masters) it ended generally by their absconding from the workhouse, and becoming vagabonds. I remember one, a boy named John Hover, who was one of the boys concerned in the two freaks I mentioned, namely, in driving the boy of weak intellect from the house, and in forcing open the relieving officer's box and stealing his money. This boy was afterwards admitted into the workhouse, and again absconded. He became a pickpocket, was apprehended and convicted at the Old Bailey, and was transported at the age of fourteen. I do not know the particular histories of many of them after they have left the house, because my own duties confine me very much to the charge of the school, and I have therefore little opportunity for making my usual inquiries, consequently all I can state concerning them is, that I know from casual observation and from indirect testimony, that the greater part of them went about the streets as vagabonds, without shoes or stockings, in states bordering on destitution—under constant and great

temptations to commit crime, and under the influence of that example which vagrant children encounter generally. I have no doubt that the amount of juvenile delinquency has been greatly increased by the neglect of the training of pauper children in the poorhouses; by the grossly vicious examples to which they have been exposed within the workhouse; by their absconding, on account of misconduct and bad treatment, from their situations with low mechanics to whom they were apprenticed; and by the consequent temptations to which they were subjected.

Tell me what you did when these children were committed to your charge?—We spent a great deal of time in talking about what had been their situations, their manners, what they were accustomed to do, how they were accustomed to act towards each other; how people were accustomed to act towards them, and they towards other people; in getting confidential accounts of their history, to see what they were from their own accounts, and their manner of living and behaving. I found it necessary to be very tender with them at first, as, unless I thoroughly knew them, I perceived that I could do nothing with them. It was not by repressing outward demonstrations I could produce any effectual result. This tenderness towards the boys themselves frequently placed me in a false position with the other officers of the Union, who were not to be expected to understand what was my intention in adopting this mode of procedure.

By degrees did you gain their confidence?—I believe I was admitted fully into their confidence upon all points. There was not a misdemeanour that I could not wholly be acquainted with upon inquiry. They found out that my object in knowing these matters was not to punish, but to help them to do better, and consequently they soon came to me as a friend to seek assistance. This mode of communicating with them seemed to create great astonishment. The biggest thief amongst them, the transported convict, was as candid as any in the whole group; and if he had remained, I rather think I might have hopes of reclaiming him. As their characters gradually improved, I was enabled to draw the line of duty more rigidly, and to enforce stricter discipline, having always the opinion of the school with me from the commencement. Things that now would be conceded as perfectly correct would have been at that time felt exceedingly arbitrary; and commanding them would have caused me to be classed in their minds with the pauper superintendents they previously had. They had been treated with great caprice on many occasions by those to whose charge they were committed; but there was certainly a great deal to try the temper of the persons who had had the previous management of them. As we proceeded in establishing entirely new relations between the children and myself, the Board of Guardians found it necessary to prevent any capri-

cious interference with the children on the part of any of the officers. A porter was dismissed for the mal-treatment of some of the boys, and for inciting some of them to abscond from the workhouse.

As respects the instruction of the school, were you able to take advantage of those moral expedients to render that instruction attractive, and to procure habits of application?—By first getting an opinion formed amongst them of the great importance of the various matters I proposed to give them, and not being anxious to have immediate application without this conviction in their minds, I found that ultimately we made more progress, and that they became very assiduous indeed in striving to obtain knowledge; and they soon showed a capability of acquiring more school learning than was necessary with their prospects in life. They speedily developed a necessity for some employment in industry to accompany the moral and technical school training.

What employment in industry do you adopt?—The Board of Guardians, a little more than a year ago, decided to separate the children, altogether, from the workhouse containing the adult paupers; and for that purpose took the house at Edmonton with an acre and a half of garden adjoining it, for the purpose of having the children solely under my superintendence, away from the vitiating examples of the adults, and enjoying the useful influences of fresh air in the country, and likewise to afford us a larger amount of facility for pursuing industrial occupations. We had, previously to our removing, commenced the tailoring, and had continued, for the time being, the ordinary practice of making hooks and eyes, though we were well aware that it was not so desirable an occupation as an art requiring more skill. Upon our removal to Edmonton we fitted up workshops, tailors' and shoemakers', and commenced the shoemaking, and gave more regularity in the application to the tailoring. We now make the whole of our clothes and shoes, and have done so for nine months. The boys keep books containing an account of every job done, and the estimated value of wages for the time employed about it: and these accounts are on the increase, and have been for some time. The guardians consider that there is a profit made upon them now. We have not done so much garden work as we now intend to do, chiefly because we were all Cockneys together, and knew little about the matter, and we have not yet been so successful as we certainly shall be by giving up a larger amount of time, and by removing from the garden all aid to the labour of the children, excepting that which we must still require, namely, the superintendence of a person acquainted with gardening, who, however, will not assist us in the mechanical labour.

What effect had these improvements on the conduct of the children?—We had no remains of the violent and maliciously

mischievous character of the boys. We are able to enforce a much stricter discipline with the same good feeling on the part of the children. Acts of depredation are now exceedingly rare; only two or three instances have occurred, at considerable intervals, since we got rid of the mass of corrupted boys whom I found in the house upon my arrival. We now, for the most part, find that though we get them very bad in many cases, they are such a minority, and the general manner and opinion among the boys is so opposed to it, that they have to conform; they make no party, and they are no feature among us. Corporal punishments are confined to the rare occasions of petty thieving that occur; other instances of misconduct are rebuked by keeping the boy in from his fellows when they are at play, or by sending him to bed an hour earlier than the rest.

What is the effect of those improvements on their application to labour?—The work is quite as popular as the instruction in the school, and they apply themselves with cheerfulness. Perhaps the gardening is the most popular employment they have, and their labour, instead of being irksome, is cheerfully undertaken. The best proof of this perhaps is, that we have more applications for children to go to service than the guardians think it right to comply with. This summer I had occasion, by order of the guardians, to answer several applications, declining to entertain them on account of there being no children of an age and condition, according to the opinion of the Board, for service. They are not sent to service under 12 years of age, but after 12 years of age we could dispose of all our children. This is our experience during this summer, which is in striking contrast to the experience of the preceding summer, when our improvements were not complete, and when the school had no reputation.

What class of situations do they procure?—For the most part they are still journeymen mechanics, tailors and shoemakers, who are still in many cases attracted by the premiums which the guardians have not ceased to give.

Do they retain their situations?—Ultimately we settle them all. Now and then we have a child trying two or three situations before he gets settled.

Supposing that you were no longer to hold out an inducement to low tradesmen to come for the children, by continuing to give the premium, and that the officers of the Union were directed to diffuse more generally a knowledge of the improvements that have been effected in the training and in the moral character and habits of the pauper children of the Union,—are you of opinion that you would have much difficulty in procuring for them situations in more respectable service, as the character of the children for good conduct and for industry became established in the minds of the parishioners?—I have no data to proceed upon, but

my conviction is, that we should at once get rid of that class of applicants, who do great injustice to the children and to our reputation, by taking children they do not need as servants, merely for the sake of the small premium given by the guardians; and I think it likely that we should have a better class of applicants in their place, with whom the children would be more likely to succeed in maintaining their independence, and preserving their character free from contamination. I am convinced that children, on account of the premium, still get into the hands of masters and mistresses who seek the means of getting rid of them.

Mr. Green was desirous to add the following written statement to his evidence:—

The West London Union comprises seven of the city parishes—St. Sepulchre, St. Bride, St. Andrew, St. Dunstan, St. Bartholomew the Great, St. Bartholomew the Less, and Bridewell Precinct. There are generally about 150 children chargeable upon it. (The number before the foundation of the Union was much greater) The children come chiefly from the courts and alleys about Saffron Hill, Field Lane, Cow Cross, &c., *i. e.*, from some of the lowest neighbourhoods within half a mile of Smithfield.

They generally enter the workhouse destitute of any school-learning, and with the principles and habits of the vagrant and depraved population of the neighbourhoods above mentioned—many of them have been trained as beggars, and many more as costermongers.

Previously to the formation of the Union, the majority of the children had been kept in the workhouses of their respective parishes, under the superintendence of some of the adult paupers, subjected to alternations of neglect, and of capricious surveillance and restraint, and with, for the most part, the very bad example of the adult paupers constantly before them.

Upon the formation of the Union, one of the earliest subjects considered by the guardians was the adoption of some more rational arrangement for the training of the children. They collected them all together (temporarily) into one of the workhouses of the Union; fitting up an outbuilding as a school-room for the boys, and a room in the house for the girls, and appointing a paid schoolmaster and schoolmistress; forming also a school committee to secure the carrying out of the intentions of the Board.

Upon my entering on the duties of schoolmaster, I found the natural consequences of the kind of training I have alluded to in full operation. The stronger boys were, for the most part, determined ruffians, many of them confirmed thieves, some of them having been convicted and punished; and nearly all, both strong and weak, addicted to lying and all kinds of low cunning. The biggest boy among them had just purchased a large clasp knife,

for the express purpose, as he avowed among the boys, of ruling by the help of it; and truly, a few days after, I came in at nine in the morning and found the school in frightful confusion. He had according to his promise drawn his knife, and upon a boy much younger and weaker than himself, had wounded him in the head, and had with difficulty been kept from doing him further mischief. With my best efforts to awaken in him some compunctions of conscience, I could obtain nothing but sullen silence, or otherwise a justification of himself, on the ground that they (the boys) all knew that he was of an ungovernable temper, and that it was their business to study him and take care of themselves. This too was much the cleverest and most plausible boy in the school, being one of the very few who had been able, from the limited amount of instruction received in the workhouses, to learn to read.

With children whose feelings and whose sense of right and wrong were so thoroughly perverted, who had been accustomed to consider punishment as chiefly resulting from the caprice or impatience of those who had the irksome task of looking after them, and who had no faith whatever in the existence of a discipline and restraint conscientiously adopted for their ultimate benefit;—with children in such a condition, to establish a mere external and compulsory discipline, a discipline with which their convictions were not in accordance, would have been to do very little indeed. It was of primary importance to convince them that their well-being was the object really sought, and that the means adopted were the best calculated for that purpose; to weaken in them also the admiration for successful mischievous petty cunning, and to bring out their hitherto dormant sympathies for the just and true. To form, in short, a public opinion that should be in accordance with the law, and thus render obedience to it attainable. To gain their confidence, and to destroy the tacit confederacy according to which they supported each other in all cases against whatever power they were subject to, it was necessary for a time to deal very leniently with numerous irregularities, to attack at first only such cases as would allow of a successful appeal at once to the general conscience, and to wait, in many instances, for the enforcement of more rigid notions of duty, till we had moral convictions more enlightened and more firmly founded. Experience amply verified the correctness of these notions. I had, almost from the first, the entire confidence of the boys; not a misdemeanour, grave or slight, was at any time committed, of which I could not be fully informed upon inquiry: and thus, by knowing intimately the habits of thinking and feeling of the boys, be prepared always to speak home to them, instead of beating the wind by appealing to sentiments undeveloped in them, or to principles and convictions not in accordance with

those they had formed. As by degrees I felt the confidence of the children in the rectitude of the intentions towards them become firmer, and perceived their sense of justice to develope itself, I was enabled to draw closer the limits of the discipline adopted among them. We have at this time got rid of the more ruffianly and corrupted boys whom I found among them at the commencement, and have softened down the characters of the remainder so far, that although we are still liable to the continual influx of perverted and wrongly principled minds, they are never in force enough to bear up against the public opinion in the school, and collect no partisans. The majority of the Board of Guardians always, I believe, entertained the conviction that the contact with adult pauperism, unavoidable in a workhouse for all classes, must render to a considerable extent nugatory any attempts to develop and form good principles and habits in the children, and, as soon as arrangements for the purpose could be completed, we were removed from the workhouse in Smithfield to a house at Edmonton, having an acre and a half of garden attached to it. Here arrangements were made for increasing the industrial employments; the garden furnishing one of the most desirable, and shoemaking and tailoring being introduced so effectually, that for three quarters of a year we have now manufactured all our own clothes and shoes. We had usually considerable difficulty in procuring situations for the elder children; this summer, however, upon the occasion of some efforts made to get them out into service, we had more applications than we could supply, and by the order of the Board I had to write declining a considerable number.

I have not hitherto alluded to the intellectual education of the children. We receive them usually grossly ignorant, and retain them, for the most part, a very short time. More than three-fifths of the children now with us have entered within the last year, and yet our numbers are materially less than they were a year ago, so that the discharges have exceeded the admissions. The change thus going on continually in the school is very great. The chief object then, intellectually, during the short time they are with us, is to awaken in them as far as possible habits of thought and observation, and to present them with the two essential arts of reading and writing. I have always found that it is better not to be too eager for immediate application, but to endeavour at first to convince the new comer of the value of the gifts thus offered to him.

Notwithstanding the continual fluctuation in the school, we have now for some time maintained the proportion of those who can read fluently, and who have learnt something of writing, at one half of the whole number attending the school. Some of the boys too, who have been with us rather longer than the average

time, both write a good hand and are tolerably expert arithmeticians. No day is allowed to pass without a conversation lesson upon some subject, either moral or intellectual. The school is enlivened by singing (the songs are Mr. Hickson's). They are sung in two parts, the elements of the notation of music being taught to the more intelligent boys.

In the play-ground, a few gymnastic poles are erected upon which the boys practise, with great gusto, Peter Parley's Gymnastics. They also ornament their play-ground with a border of little gardens, in which possibly they take the more interest, being Cockneys. The first time I succeeded in getting any number of them to give out their own thoughts and sentiments in their own language, was upon giving them "Gardens" as the theme.

I have thus, Sir, put together very roughly a few facts concerning our condition and endeavours. If you can make them in any way serviceable to the cause you have so much at heart, you will add one more to the many gratifications you have afforded,

Sir,

Your very grateful and obedient servant,

H. GREEN.

John Sutton examined by *Dr. Kay.*

You are master of Greenwich Union Workhouse?—I am.

You have been master of several workhouses in town and country?—I have, for about ten years.

Have you had any opportunities of observing the effects of the intercourse of children with adult paupers, when there is not an accurate classification maintained in workhouses, and when they are more or less placed under the superintendence of paupers?—Yes, it has always been a common observance with me, that they have imbibed the vicious habits of the persons with whom they have been mingled.

Are you aware whether it was, previously to the passing of the Poor Law Amendment Act, always considered desirable to provide the services of a well-trained schoolmaster, at a sufficient salary, for the management of children in the workhouses?—Prior to the passing of the Poor Law Amendment Act, I was at Covent Garden nearly four years; and two or two years and a half of that time we had a pauper schoolmaster; and from the evil effect of the boys mixing with the paupers, and the man himself not being competent to instruct the boys, so as to engender in their minds proper notions, the guardians determined upon the election of a schoolmaster. They went to the central school of Westminster for one, and one was appointed. He had been only two days in the discharge of his duties, when the boys all rose up in rebellion against him. He sent for me to assist him, and stated that he

had not been in the habit of using coercion, and that he must give up the situation, for the boys were so ungovernable he could not manage them. I told him, I thought if he persevered we should soon get them into a better state of subordination. I recollect his calling to one of the boys to repeat the Lord's Prayer; the boy refused: he went to every boy to repeat the Lord's Prayer, and not one of them would do so. They said they did not know it; but I know they had been in the habit of attending church, and of course of repeating the Lord's Prayer.

And was it, or was it not, common in your experience in many of the parochial workhouses to mix the children with the adult paupers without any classification, and to leave them without any instruction?—Certainly it was; I have seen several instances of that. Previously to the appointment of the schoolmaster in the Covent Garden workhouse, it was a very common thing for the boys to abscond over the walls and to be brought in by the police in a state of great destitution, and their misconduct was extremely great at all times. But the effect of the improved management, consequent upon the appointment of the schoolmaster, was very speedily observable, in the greater facility with which they procured situations, and in their retaining them for a longer period. Before the arrival of the schoolmaster, the boys were constantly flogged for misconduct, and other species of coercive means were employed unsuccessfully, for the insubordination and disorder was as great as before. In about three months after the arrival of the schoolmaster we were able to dispense almost altogether with the use of the cane or any other means of corporal punishment, and quiet and order were established in the school. Previously to the arrival of the schoolmaster a great number of the boys wilfully left the house, going nobody knew whither, and living in the street in beggary: or wandering about the country, probably to a considerable extent supported by petty depredation. I have had them frequently brought from the market, being apprehended by the police for petty thefts from the stalls: and, after remaining out of the workhouse for some time, they would generally return in a state of great destitution and weakness. A considerable number of the children were apprenticed with premiums. Some of the children did pretty well from getting respectable masters, but generally they were taken by a class of persons who had the premiums more in view than the services of the children. It generally happened that those parties kept them six or eight months, and that they then either put them off to other persons who had casual need of them, or thrust them forth into the street, or abandoned them when they removed their lodgings or habitations. Great numbers of them therefore returned to us in states of destitution.

Are you of opinion that the amount of adult pauperism was

likely to be increased by this neglect of the training of the children?—Materially so.

Does your experience, as master of various workhouses during the last 10 years, enable you to determine whether a considerable number of those who are now dependent, as adults or aged persons, upon parochial relief, resident in the workhouses, lived there during their youth?—A very large portion of them have been brought up in the workhouses. I have known instances of three generations living in the house.

Can you state what has been the effect of this neglect and this admixture with the adult paupers upon the future character and conduct of the girls especially?—In some few instances they have turned out perhaps very good in their conduct, but by far the majority have turned to prostitution; others have changed their places frequently, and evinced no disposition to settle.

Among the lowest and coarsest prostitutes of London, would you expect to find many girls who have been brought up in workhouses?—A great many. If a statement were taken, I have no hesitation in saying you would find at least a third. I have been master of the Greenwich Union workhouse three years and a half, and various difficulties have prevented the Board of Guardians from establishing a central Union workhouse until the present period, when the workhouse is nearly completed. During the early period of the operations of the guardians constant efforts were made to overcome those difficulties. A classification in the workhouses was not established; the Union still maintained the Woolwich, Greenwich, and Deptford workhouses; and in each of those, four classes of paupers were received, namely, adult males and females, and children of both sexes. The children were therefore mixed with the adult paupers, and were superintended and managed by paupers who grossly neglected their duties and maltreated them. One of them was prosecuted for a misdemeanour. This pauper had been in the habit of practising gross deceptions on the Board of Guardians, in order to make the management of the children appear better than it really was; she had caused the copy-books of the children to be filled with writing not their own, and put their names at the foot of the pages, and, upon examination by the Board of Guardians, it was discovered that the children were unable to write, though the Board had been led by this deception to believe that they were very forward in their acquirements. Besides which, it was discovered that she had treated the girls with extreme caprice and personal violence: had deprived them of their food and sold it out of the workhouse, and prevented the children from disclosing her deception and cruelty by a system of terror. The consequence of this upon the children was to create extreme rudeness and cunning. We could not ascertain the truth from the mouths of the children themselves until she had left the

workhouse, and they were free from any apprehension of her return. Soon afterwards, the children were all removed from the workhouses inhabited by the adults to the Deptford Union workhouse, where they were placed under the management of Mr. Dunlop, and removed as much as possible from the influence of any paupers, except the pauper servants, eight in number, who are still retained in the children's establishment, but they have been kept as much as possible from any association with the children. I have not had much opportunity of judging of the condition of the children; but my observations lead me to say that they are exceedingly improved in character and conduct, and that this improvement affords the best prospect for putting them forth to service, so as to secure their well-being in after-life, and to prevent their future dependence upon the parish. At present our workhouse is situated in a somewhat remote part of the parish of Deptford, and not open much to the observation of the respectable inhabitants of the Union; and the improvements in the training of the pauper children, therefore, have not yet become a matter of considerable public notoriety. But I have no doubt that, as soon as they are generally known, we shall be very successful in procuring for the children much superior situations to those we have hitherto obtained, and that they will by their own character, and by the treatment which they will receive from their employers to whom they are sent, be enabled to retain their situations with great certainty. I long to see every inducement removed (as respects premiums) to persons not having real need of the services of the children, to make application for them: because I am sure that the methods that are now adopted for rendering the children fit for service will make them more desirable servants to persons wanting assistance, than they can procure by any other means.

Deptford Workhouse, Greenwich Union.

HONOURED SIR,

WHEN I first came here, everything, as you are aware, was in a very deplorable state, and the children all but what they ought to have been. The two sexes, however, presented a complete contrast. The boys were in a state of the most degrading subjection; so much so, that no one durst move, at any time, from one part of the school-room to another but on tip-toe: nor speak, except in a whisper. To express a wish was construed into disaffection to the powers that *were*—to utter a complaint, into open rebellion. How they felt towards their superintendent in such circumstances and under such treatment, can be no hard matter to divine. But whatever their feelings were, they were effectually swept off by the most unsparing use of the birch, applied in the most degrading form. The only feeling I ever saw them express

towards their former superintendents was their hooting and hissing the last of them upon his being removed to Woolwich workhouse; and then, being free from bodily fear, so far as hissing and hooting goes, they were unsparing in their execrations. Previously they had conducted themselves as you would expect of persons in perpetual fear of the inquisition, so that it was not to be wondered at the only feeling in the boys' minds was suspicion and hatred, and the only features of their character cowering meanness and unfathomable deceit, when we reflect upon the description of persons to whose care they had been committed, and the treatment they experienced at their hands. These persons were three in number. Two of them could neither read nor write; the third person, who was the principal of the "triumvirate," was the one who pretended to teach the boys reading, writing, and arithmetic, was a lunatic—and died of disease of the brain about two months ago in Greenwich workhouse. He had been brought up to the business of a gardener, and knew nothing of teaching, still less of human nature or morality. He gave the boys lessons when he was in the mood, and made each, as far as he had books, "lesson" himself, when he was not in the mood.

The other two, who were seamen, were the very models of indolence. All the three were equally addicted to such low practices as swearing, want of veracity, and secret tippling.

Of all this the boys were silent witnesses, but apt scholars. They appeared in all things determined to act as dishonestly as they had been taught. I have known them, after they had eaten till they left part of their food from satiety, devour with greediness a stolen morsel, though of inferior quality to that which they had left a few minutes before; and have detected boys giving away food (which they had stolen) because they could not eat it themselves, and had not even tasted it. Indeed, they acted as if dishonesty and lying had been the leading articles in their code of morals. I have frequently tested their veracity, and for months after I came among them found they could hardly speak the truth, even when one would have thought that it must have been evident to themselves how much better the truth would have helped them than a falsehood. But whether from bad habit, or from having become fond of intrigue, I cannot tell;—they never could or never would tell me their reason for equivocating,—they just did it,—they did not know wherefore,—such had been the example set before them.

The girls, on the other hand, though nominally under the care of the pauper women, were under no control whatever. They were at open war with all mankind, and with one another when there was no other enemy to attack. Their hall, when no one was present but themselves, was the scene of the most boisterous mirth, or animosity and quarrelling. They conversed only in the

commonest slang, and to differ in the merest trifle was the signal for the lowest invective and threats. But when any of their superiors, whom they treated as their common and natural enemies, attempted to set them to rights, the whole scene was changed. That animosity and war which had been raging among eighty girls, from sixteen years of age downwards, was turned against one solitary enemy, and happy might he or she be if they escaped with sullen and contemptuous looks, and with no other defeat than their commands contemptuously disregarded. Nor was their conduct in school or in their wards one whit better.

So far the boys and girls differed,—the boys were broken-spirited, cringing, and deceitful; the girls were refractory, obstinate, boisterous, and insolent; but in every other respect they were almost equally proficient or deficient. Neither party had at all a proper notion of right and wrong, morality or immorality; both boys and girls were equally addicted to lying, swearing, and petty thieving; not one of them had the slightest idea of turning the little religious knowledge they possessed to any practical purpose. Those among them that could read or repeat their catechism, read like machines, or repeated their catechism by rote. Ask them a question from a verse in the Bible they had but just read—they gazed. Ask them a question from their catechism, ever so slightly altered from what it is in the book—they either could not answer at all, or blundered out something as different from the question asked as day is different from night. Not more than twenty of both sexes could read the Scriptures with anything at all approaching to accuracy. Only eight girls had ever tried to write, and not more than twenty boys. Not more than twelve, in both schools, could work a single sum even in Simple Addition. Only two girls knew how to make figures.

I think it is proper to mention here the means of instruction enjoyed by the children of the respective parishes, previously to the school being formed at Deptford, and then the means of instruction we found in this house upon our arrival.

The boys in Greenwich workhouse, as already stated, were under the care of a lunatic pauper, whose incapacity for any such charge has been already detailed. The girls were under the charge of a female pauper, who for her misconduct and cruelty to the children was sent for six months to the House of Correction. The lady, however, made the girls pretty expert at needlework.

The boys in Woolwich workhouse were under the charge of a pauper, who had been a teacher; but, on account of his dissipation and other immoralities, had lost his school and become a pauper. In the forenoon he superintended them in picking oakum; in the afternoon he taught them reading and writing upon slates, and a little ciphering; but either his labours were thrown away,

or he must have been negligent. The girls went out to a charity school, where they were taught reading and needlework. They had made considerable progress in learning the use of their needle, but very little in reading.

The boys in Deptford workhouse went to a charity school in the forenoon, and picked oakum in the afternoon. The girls went to the same school the whole day, to a female teacher, and were taught reading in the morning and sewing in the afternoon. One would think that, from these advantages, they might have made some progress in their learning more than they did; but I am informed that the teachers in all of these schools considered them as intruders, and bestowed the least pains possible upon them.

The books in possession of the children, upon our entering upon duty were—Bibles 36, New Testaments 30, a few Prayer-books, and 11 slates, and no desks. This comprised the furniture of both schools.

Such was their disorderly and neglected state. It is not therefore to be wondered at if they had erroneous and perverted ideas of religious and moral duties. It was with difficulty that they could be made, with even outward decency, to attend to anything religious. They held all such things in contempt. At prayers, morning and evening, and in church, they behaved with gross impropriety; and, if they did attend to any religious service during its performance, their immediately giving themselves up to all manner of levity and improper conduct showed that, however they might draw near to God with their lips, their hearts were far from him.

The Board of Guardians, however, have done everything we have suggested for the children's improvement. We have been as moderate in our demands as possible; and they have never refused a single request we have preferred. As for books, we have still too few; but, by borrowing from the one school to the other, we easily supply the deficiency.

The guardians have given us a gallery in each school-room, capable of containing 100 children each; in each school-room a sufficient length of desks for 38 children to write at a time; two black boards, each four feet by three feet; 24 natural history pictures; two sets of the Home and Colonial Reading Tablets (the "Reading Disentangled"); 12 sets of copy-slips, varnished; five dozen Bibles; four dozen New Testaments; six dozen of Chambers's Introduction to the Sciences; six dozen of Chambers's Rudiments of Useful Knowledge; four dozen Tutor's Arithmetic; a Map of England; and the boys have collected sufficient money to purchase two globes, which they are going to buy and present to us, for the use of the school in time to come.

When we entered upon our duties in this house, no time had

been afforded to make any domestic arrangements on account of the children having been so recently collected together. The present arrangements are as follow:—

The boys get up at five o'clock A.M., and the girls at six o'clock. Both boys and girls are divided into classes, seven in each class; and each class has a monitor and an assistant. It is the duty of these monitors, in the morning, to see that each child under their charge is thoroughly washed every morning, combed every alternate morning, and that they keep themselves clean and tidy during the day. The duties of the monitors is the same among both boys and girls: except that the monitor among the girls must mend the clothes of the girls belonging to her class in the evening; or, if the girl be able, see that the girl mends them herself. The monitors also serve out the linen to their classes, and assist in dressing them for church.

All, both boys and girls, must be washed by half-past seven o'clock, when prayers are read. At eight o'clock they are assembled by the house-bell for breakfast. At nine o'clock they assemble in their respective school-rooms, except 28 girls who are employed in washing and the domestic work of the house.

The girls who are in school sing a hymn and have a short prayer in their gallery 'till half-past nine o'clock, when they commence needlework, at which they continue, with the exception of a short interval of a quarter of an hour, till twelve o'clock, when they are dismissed for dinner. The time between dinner and two o'clock they spend in recreation in their yard or hall, according to the weather.

The boys commence their duties in the same manner as the girls. After this hymn and prayer, I either give them a lesson or hear them read a portion from the Scriptures till ten o'clock. These boys are in school next day, and another section of boys, of the same number, take their places in the shops, and continue to work during school-hours. At ten o'clock, when the tailors and shoemakers are dismissed, the first class of those in school write. The other three classes read either to me or to their monitors till twenty minutes to eleven, when they are all dismissed for a quarter of an hour. At eleven o'clock they are all at their tasks; the first class ciphering, the second and third classes writing, till half-past eleven o'clock. At half-past eleven they go to ciphering till twelve o'clock, when they are dismissed similarly to the girls. At two o'clock the tailors and shoemakers go to their shop; all the other boys and every girl go to school.

At this hour, the first class of boys read in Chambers's Introduction to the Sciences till three o'clock. From three till half-past four o'clock they cipher.

The second class cipher from two till three o'clock, and then

read either from cards or from Vyse's Spelling-book (which we have not yet got discarded) till half-past four o'clock.

The third and fourth classes learn to make figures and to cipher from two till half-past two. From half-past two o'clock till three they learn their catechism. From three till half-past four o'clock they learn to read and spell, when the whole school is dismissed.

These are the whole of the arrangements in the boys' school, except that, on every alternate day, I give them a secular lesson in the gallery, from half-past eleven till twelve o'clock.

The routine of the girls' school, in the afternoon, is very little different from that of the boys' in the forenoon.

Till half-past two o'clock I give the girls a gallery lesson, viz., a Bible and a secular lesson alternately. From half-past two till half-past three o'clock the first section of the first class write, the second cipher. From three till half-past the second write, and the first cipher. The two junior classes read at that time. From half-past three o'clock till a quarter to five the first class read, one day from the Scriptures, the other from Chambers's Rudiments of Useful Knowledge; the under classes reading all the time from cards, except the last half hour, when they learn their catechism. At a quarter to five o'clock they sing a hymn, have a prayer, and are dismissed.

At six o'clock all the children have supper; at a quarter to seven they all assemble in the boys' school for prayers; at half-past seven they all pass off to bed, except the girls who are employed in domestic work in the forenoon; and the monitors, who do needlework till a quarter to nine, and then they pass off to bed.

To assist us in these arrangements, we have a paid shoemaker and tailor for the boys, and a paid nurse for the girls. We had at one time two nurses for the girls; one to take charge of the girls engaged in domestic matters, and another to assist in school, but had to dismiss one of them. We expect another very soon to supply her place.

The change in the children's conduct, since the change in their circumstances, though slow, has been, I am happy to say, very great, both morally and intellectually. The boys are now open in their manners and straightforward in their dealings. They no longer persist in denying a fault to the last moment. Deep blushes and a spontaneous confession tell better things of their hearts. They have made more intellectual even than moral improvement. There are 100 and odd boys learning to write, and many of them write very well.

But the greatest moral change has been among the girls; they were worse than the boys when we came among them, at least

openly worse. But now they indeed surpass the boys. I could multiply instances of the improvement in their behaviour to their superiors, and in other respects. Upon our first going among them, they, to a girl, combined to disobey, to annoy us, and to conceal one another's faults; now all are submission, and emulous in their endeavours to gain our confidence and esteem. The defaulter is generally the informer, and at worst, makes a frank confession, and instead of showing contempt as formerly, the severest punishment we can inflict, except solitary confinement for some obdurate ones, is to set them up in front of the gallery, tell their fault, and exhort the rest not to follow their example. The greatest reward to mention the conduct of any one as being worthy of imitation. I have seen them lately when reported for misconduct shed tears more largely, though aware no great punishment would be put upon them, than they would for the severest punishment we could inflict.

Their conduct during any religious service or instruction is quite exemplary, and their behaviour afterwards generally very becoming.

Swearing, lying, and even low language are quite banished from the house, except it come from some one newly admitted. The only instance we have had, for a very long time, of theft was committed by a girl who had been in the house only a few weeks, and the only punishment she got, or required, was the disgust expressed by the others at her conduct.

The girls are, however, not so forward in their intellectual improvement as the boys. The boys have gone through all the four fundamental rules of arithmetic, simple and compound, several times, except compound division, which they have done only once; while the girls have not yet got through simple multiplication. But many of the girls, of whom sixty-four write, have made very great improvement in that branch, considering the degree of attention that has been bestowed upon them.

I do not find that the girls get places much more readily than formerly. The character of the children in the workhouses of this Union was so notoriously bad that it will be some time before it can be replaced by a better. It will not be done by any of the girls that are now of age for service, for they have almost all had several places previously, and have been accustomed for years to the corruptions of a workhouse. It must be done by those who have been under proper training from their early youth.

Little can be said of the progress the boys have made in the trades; we have been unfortunate in our shoemakers, as two of them left us, after remaining only for a short period each, so that the boys always lost as much in the intervals, when we had no

master-shoemaker, as they had gained from his predecessor, and it is but a few weeks since the tailors commenced new work.

I am, honoured Sir,
Your obedient servant,
Dr. Kay. (Signed) DAVID DUNLOP.

Children's Establishment,
SIR, *Limehouse, February 1st,* 1840.

I HAVE, in compliance with your request, prepared an account of the condition of the children at Limehouse establishment, as directed in your circular.

When I came to Limehouse the instruction of the boys was entrusted to three old paupers, who for three hours in the forenoon taught them to read in the Bible and New Testament, I believe without offering any explanation. These were the only class-books which I found, except a few tablets and cards of the description used in the National and British and Foreign Schools. The industrial departments were also conducted by paupers.

A few boys were at shoemaking and tailoring, but their industry consisted chiefly in spinning hair. I found one or two boys only that could read tolerably well; others read indifferently, but the greatest number could not read at all. Their acquirements in writing, arithmetic, and general knowledge were very imperfect; and as to their moral conduct, discipline, and religious character, it was anything but good. Lying, cheating, stealing, and rudeness of manners were the chief ingredients in their character; and the want of principle was so great, that the only way to secure good behaviour was to look constantly in their faces. A few of them could repeat the catechism, but the great body of them could not. The chaplain had service on the Sunday mornings, and he came also through the week, but his instruction was chiefly devoted to the girls for several weeks after my arrival. The girls also went to church regularly; the boys did not for months after I came. The boys in this respect seemed to be much neglected, and therefore their religious knowledge was very limited. They were, however, receiving instruction in psalmody and moral songs twice in the week. The infants had no instruction at this time, and therefore their discipline (as might be expected) was very bad. The girls were taught upon the national system by Mrs. Hoare, the present schoolmistress.

And respecting improvements, I have to state that about the time I came to Limehouse, the Board of Guardians were fitting up a large and spacious school-room, in one end of which is a gallery sufficiently large to seat 200 children. The other part of the room is divided into four classes, each class with four grades

of desks, the one rising a little above the other. These classes contain about fifty children each, and are separated from each other by means of canvass curtains fastened to iron rods by rings at the top, and may be drawn aside at pleasure. Besides this is a black board, a Bible stand, twelve lesson-posts for the use of the infants and lower classes of the juvenile schools; two cupboards, one for the boys' and one for the girls' school, to contain books, copy-books, slates, maps, &c. We have been also furnished with pictures illustrative of Scripture and natural history, also five maps; viz., England, Ireland, and Scotland, maps of Europe and Palestine, and I expect soon a map of the world.

I received also from the Board several books for my own use, such as the Book of Trades, Stanley on Birds, Chambers's Introduction to the Sciences, Minerals and Metals, Lessons on Objects, History of the British Empire, Stewart's Modern Geography; also books of animals, birds, and fishes. In addition to these, I received Cobbin's Bible. The school-books in use are the Juvenile Reader, in the first and second classes, the Edinburgh Sessional school books, in the third and fourth classes. When reading, the first and second classes are formed into one, and read in the Bible and Juvenile Reader on alternate days.

With respect to the character of the discipline which has been established, I think you will form a better idea of it by describing the routine of school and industry from the hour of rising till bed-time. The hours of rising had been regulated by the Board of Guardians, and are as follow :—

May, June, July, and August, five o'clock.

March, April, September, and October, six o'clock.

November, December, January, and February, seven o'clock.

At present the children rise at seven o'clock, are washed, and examined as to their clothes, shoes, &c., being in a proper condition. Prayers at half-past seven, conducted in the morning by me, in the evening by Mr. Cladon. The shoemaker and tailor superintend the washing and meals on the boys' side; three nurses do the same on the girls' side. Breakfast at eight o'clock. The children play in the interval between breakfast and nine o'clock. At nine o'clock bell rings. Children assemble in classes on the play-ground. March orderly to the gallery. Boys seated on one side, girls on the other.

Gallery Lessons.—Geography, natural history, lessons on minerals and general objects; quarter before ten children go to their classes, singing some lively air and marching.

First Class.—Quarter before ten to quarter past ten, arithmetic; quarter past ten to quarter before eleven, writing. (Go out for a quarter of an hour.) Eleven to twelve, reading in Bible and Juvenile Reader on alternate days.

Second Class.—Quarter before ten to quarter past ten, writing;

quarter past ten to quarter before eleven, arithmetic. (Go out for a quarter of an hour.) Eleven to twelve, reading in Bible and Juvenile Reader on alternate days.

Third Class.—Quarter before ten to quarter before eleven, reading and spelling; eleven to half-past eleven, writing on slates; half-past eleven to twelve, arithmetic.

Fourth Class.—Quarter before eleven to twelve, at lesson-posts, alphabet, spelling, &c.

It is proper to notice that this arrangement of the classes refers only to Wednesday, Thursday, and Saturday. On Monday a gallery lesson, as on other days, to quarter before ten; quarter before ten to quarter before eleven, catechism and collects; eleven to twelve, catechism explained by the chaplain.

Tuesday.—Nine to quarter before ten, learning words of tunes. (Go out for a quarter of an hour.) At ten, boys and girls assemble in their gymnastic divisions on the play-ground. Boys put through their gymnastic exercises before the visitors (if any), and afterwards march to the gallery.

Friday.—Learning words of hymns and the notation of music from nine to ten; from ten to eleven, psalmody; eleven to twelve catechism and collects.

The chaplain addresses the children on the evening of this day. The boys' end is lighted now with gas. I may also mention that a select class of boys and girls attend Mr. Williams's church every Wednesday evening, to practise singing by the organ. Twelve o'clock (bell rings), dinner; the interval between which and two o'clock occupied with play.

Infant school, superintended by Mrs. Campbell.

Infants assemble on the gallery at nine o'clock, along with the other children, to quarter before ten. (Go out for a quarter of an hour.) Ten to eleven, revising yesterday's lesson, and communicating a new one from the Bible. Eleven to twelve, lesson-posts, alphabet, spelling, &c. Two o'clock to quarter past three, lesson on the gallery on natural history, and general objects, responses, &c. (Go out a quarter of an hour.) Half-past three to five o'clock, lesson-posts and revising the labours of the day on the gallery.

Industrial Department (Boys).—Two o'clock, bell rings; shoemakers, tailors, carpenters, and spinners march to their respective shops, and remain at work till five o'clock.

About thirty-six little boys, who are not fit to work, are taught with the infants in the afternoon.

At five o'clock children quit their various employments, and remain at play till six. Then they get supper, say prayers, and go to bed.

The shoemaker and tailor sleep in the rooms with the boys. The nurses do the same on the girls' side.

Industrial Department (Girls).—The girls are arranged under three general divisions, viz., the school girls under Mrs. Hoare, the laundry girls under Mrs. Jackson, and the house girls under Miss Fryar.

The school girls are engaged from two till five in the afternoon at needlework, such as sewing, marking, and knitting.

The number of girls set apart for the laundry and housework is thirty-six: twelve of these are in the laundry, twelve at housework, and twelve at school; but the arrangement is such, that the girls who are at school this day are at housework to-morrow, and in the laundry the next day; so they are engaged in these departments of labour and school successively and in rotation. Besides these, there has been a selection made of other sixteen girls from the school, eight of whom assist the girls at housework, the other eight at school, week about.

By this plan twenty are constantly at housework and twelve in the laundry; total, thirty-two. The house girls mend the linens of the house in the afternoon, superintended by Miss Fryar, the housemaid.

And now I am happy to report this:—The conduct of the children in these various departments of school and industry is for the most part good, their attainments respectable, and their morals and subordination greatly improved, especially since we began the "Register of moral conduct."

I am happy also to say that very few returned that went to situations since I assumed the charge. Out of fifteen boys that went to situations, as far as I remember, three only returned to the workhouse; and out of twenty-six girls, six returned. Those that kept their places, so far as I can learn, are doing well.

DANIEL CAMPBELL.

Mr. John Claydon examined.

Dr. Kay. You are master of the Limehouse school of industry?—I am.

Have you any knowledge of the means adopted for the training of the pauper children of the Stepney Union previously to the establishment of the Limehouse school. If so, be good enough to state generally what was its character?—The girls had been, in the first instance, after their separation from the adults, under the care of a person who was originally the nurse of the pauper children; a woman of respectable character, but of moderate attainments. The boys were placed not actually under the care, but under the instruction, for three hours a-day, of a schoolmaster appointed for the purpose who did not reside on the premises with them; and the rest of the day they were employed, some in picking oakum, some in spinning hair, under

the superintendence of a pauper. Some short time previously to their coming to Limehouse, a schoolmistress able to teach them on the National System had been appointed to the girls' establishment at Mile End Old Town. I ought to have stated that the girls were in a separate establishment at Mile End, but the boys were in the workhouse with the adult male paupers at Limehouse.

Since that period the girls have been removed from Mile End to Limehouse, and the adult paupers have been separated from the boys, and you have now an establishment devoted solely to the training of the pauper children at Limehouse?—Yes; it was twelvemonths last November since the change occurred.

You are master of that establishment?—I am.

Will you state in what condition you found the children, morally and intellectually, when they came under your charge? —The chaplain had attended the boys regularly, but he had constantly complained of their inattention to his teaching, and the little effect it appeared to produce upon them; and he had lamented to me frequently the evil influence that the adult paupers had exercised on the minds of the boys. They were not in a worse condition than I should have expected to find them, under the circumstances, but their training had been very much neglected; they could write very well, several of them, and they could read very tolerably, but beyond that, there seems to have been no intellectual information given them at all. Immediately previously to my taking charge of them, a change had been made in the nature of their employment; they had been employed as tailors and shoemakers, still retaining the hair spinning, but all of it under the superintendence of a pauper. Probably the most prominent thing that struck the attention was the extreme selfishness of the children; they seemed to have no sympathy with each other, and a perpetual desire to appropriate everything they could lay their hands on to their own use was manifest, I think, in all of them. This continually developed itself in acts of petty thieving. There was great stubbornness of disposition and a rebellious spirit. They had perhaps never experienced the kindness addressed to the mind; any kindness that had been shown them was in the shape of bribery; they had no kindness shown to them as appealing to the mind generally; they did not know how to appreciate it.

I understand you to mean, that the children had not been treated with mildness and affection, at the same time with that firmness which establishes in the mind a sense of justice and equality of treatment?—Yes; it appeared very difficult to convince the children that you were desirous of promoting their welfare. Their manners were coarse and their language equally offensive. I could not depend upon their statements; they would

frequently attempt to deceive me. They almost universally went to their labour unwillingly, as a drudgery; they never seemed to entertain the idea that in future they were to provide for themselves. Previously to the removal of the girls from Mile End workhouse, as I have already said, the Board of Guardians had appointed an industrial mistress, who had commenced instructing them in household work, in washing, ironing, and general domestic service; and the effect of this training upon their habits had already begun to manifest itself; but their habits were still wanting in neatness and propriety, and in a steady and punctual attendance to their duty.

You were previously master of the Ratcliffe workhouse, before the formation of the Stepney Union?—I was.

Were the children of the parish of Ratcliffe then under your own management?—Yes.

Was it at that period the custom of the parochial officers to apprentice the children, and to pay a premium with them when they went to service?—With the boys it was almost invariably adopted, but not frequently with the girls.

Since the Limehouse school has been formed, have you had the assistance of a Scotch schoolmaster and schoolmistress, in addition to the previous schoolmistress; and, likewise, the pauper servants who were formerly employed to superintend the labour of the children, and to act as nurses in the establishment, have been dismissed, and paid nurses have, with one or two exceptions, been appointed in their stead. Skilful superintendents of the labour of the boys have likewise been appointed, and various other improvements in the discipline and management of the house adopted; and especially a mild, intelligent, but firm and equal discipline has been adopted, making a constant appeal to the sense of duty on the part of the children, and pointing to the highest motives in persevering for well-doing. Will you state generally what has been the effect of this training on the character of the children in this establishment?—Upon all those whose habits were not confirmed, in consequence of having been long exposed to the bad treatment usually exhibited, it immediately had very great effect in producing improvement, and that improvement has gone on progressively. There appears to be a great attachment existing between the children for each other. In all cases they are willing to assist each other in work, and in sickness, and in their studies. They are very willing on all occasions to contribute to each other's amusement: they seldom quarrel. There are very few acts of dishonesty, excepting in those who may have recently arrived; I may almost say, never. Their application to labour is invariably cheerful: they always exhibit a contented, happy state of mind. Their facility of acquiring knowledge is very much improved: the amount of

knowledge they obtain is very considerable: their knowledge of the Scriptures is become very extensive: their knowledge of geography, and their general acquaintance with natural objects and phenomena is respectable. They have a decent skill in arithmetic; and write and read with considerable facility. The shoemakers have acquired such skill that we have put out three boys to superior shoemakers, in very good situations, without any premium whatsoever, and only with the common outfit of clothes. Three of the tailors have gone out as journeymen tailors, without premium; two of them receiving at the commencement of their service 12*s*. 6*d*. a-week, and the other one 10*s*. One was 15 years of age, and the other two were 14.

These employments are not designed to fit them all to become tailors and shoemakers, but to give them the habit of industry, and to inure them to persevering and steady labour. Will you state the general effect of the training in the formation of such habits?—The effect is, to fit them in after-life to perform those services for themselves, so as to repair and make their own clothes, conceiving it an admirable qualification for a man in any circumstances, but especially for sailors; and many of our boys go to sea.

State the means you possess of training them for the sea service?—We have a mast, thoroughly and completely rigged, with a complete suit of sails, and a master comes on certain days in the week to teach them all that can be taught them, with such an apparatus, of a seaman's duty.

What effect do you find this training in industry, and upon the mast, has in facilitating the obtaining situations for the boys at sea?—It has just this effect: that we could send twenty times the boys we have away if we had the number to prepare them. The boys would be cheerfully taken by masters of ships who have seen their performances at 14, whereas otherwise they would not take them under 15 or 16 years of age, and a premium would be required.

Do the masters of vessels ever come to ascertain, by personal inspection, the qualifications of the boys?—Very frequently: we have had them come forward to ask whether we had any boys fitted for the service, and upon the hands all being turned up, they have immediately said they are all too small and too young. I have then requested that they would see what the boys could do; and immediately upon seeing that, they have selected two, three, and four together: two in several instances have been taken. They have said that the knowledge the boys acquire is certainly worth two inches in height, or two years in age.

Have you had any opportunity of ascertaining how boys who have gone to sea without premiums have conducted themselves on board ship, and whether they have retained their situations?—

The greater number of them have. We have had very few instances in which they have returned. One returned in consequence of inability to discharge the duty; he was little more than 12 years of age: and two have returned from dissatisfaction with the service. Those are the only instances of boys who have returned.

Is it now the custom of the Board of Guardians to give any premiums with children when they go to service?—No. They remain fewer years in the workhouse now; and all those to whom the system of training could be fairly applied, that is, where their habits had not been previously formed, get out considerably earlier, notwithstanding there is no premium. The average age at which they formerly went to service was about 14 or 15 years of age: the age at which they now go to service is about 12 or 13 years of age.

I understand you to say that the effect of this training is not only to occasion the saving of the expense of apprenticing children and of providing the requisite premium, but to insure their going to service two years earlier than they otherwise would do, and to render their retaining their situations more certain?—That is correct. We are also able to procure for the children very much better situations than we did when they were not thus trained, though premiums were formerly given with them. We obtain altogether a different class of situations for them. They are now received into families of persons moving in respectable situations on account of their sense of their trustworthiness, and of their more correct habits and deportment. We have had latterly several striking instances of the effect of the training in this respect. The conduct of one little girl in service was recently so exemplary, that she procured for four other children situations of a superior character. We have had only two cases in which children have been returned to us for acts of dishonesty, and they were thirteen years of age when they came to us. They had been in workhouses containing adult paupers during the greater part of their lives. No boys have been returned for any acts of dishonesty.

What is your opinion as respects the future conduct of the children who have been thus trained and put to service; are they likely to become again dependent upon parochial relief?—I do not think they are at all likely at any future period to be dependent upon the parish; there is no necessity; they have obtained situations likely to prevent the necessity, and they have none of those habits likely to occasion their falling back into a state of dependence.

Have you any knowledge of the consequences of the previously imperfect methods of training paupers upon their future career?—They were not fitted for situations so good as they now acquire, and the consequence of apprenticing them was very frequently

fatal to the child's welfare and future prospects. They were taken by needy people, who really took them merely for the purpose of obtaining the premium, and who considered the child an incumbrance with it. The children were consequently ill-treated, and being in very inferior situations, they became disgusted with their employment, because of the character of their employers; and they have been in very many instances, from my own experience, thrown back upon the world.

Supposing, therefore, that the test of parochial or Union administration to be the reduction of expenditure so far as that might be consistent with the well-being of the poor, are you of opinion that economical considerations alone justify the adoption of similar expedients of training the pauper children to those which have been carried into execution in the Stepney Union?—I have no doubt a greater saving would be effected in future by adopting such a system than by any other means that could be devised. In the first place, we diminish the period of residence in the workhouse two years; next, the apprentice fee and expenses are saved; next, the children obtain superior situations; they seldom return even temporarily to a state of dependence: they have a strong conviction that they will certainly retain an independent spirit and position in after-life, so that instead of rearing a race of paupers, we are now rearing a race of independent workmen and servants. I do not know how to express my opinion sufficiently strongly respecting the pernicious effects of apprenticeships of pauper children with premiums, and without previous training. The children were almost invariably taken by persons who had no need of their services, but to whom the premium was a temptation, and they were frequently driven into the streets and compelled to follow vicious courses. Frequently persons come to apply for children at the Limehouse training school; I immediately tell them we give no premium; that readily disposes of scores of applications, and those who persist in the application are respectable individuals who have real need of the services of a well-trained and well-conducted child. It was only the other day that the captain of a ship came to the school to ask for a boy; I told him that we had no boy old enough to go to sea. He said, "I have seen a little boy at sea scarcely higher than a coil of rope, who has been trained in this school, and he conducts himself so well, and is so active and useful, that I am determined to have a boy like him if I can obtain one; and he told me that there is a boy about his age in the house who would suit him." I did not recommend the captain to take any boy from the school, but I have no doubt that the influence of this little boy and of other boys in similar situations will procure us a constant demand for the services of the children. We have sent three boys to the South Sea fishery, and we have

had very satisfactory accounts of them. Latterly one of the owners called, and among other incidents related, that as his vessel was going down channel on her last voyage with one of the boys from the school on board, the Pilot said, "It would be as well if the royal were lowered, I wish it were down;" without waiting for any orders, and unobserved by the pilot, the lad whom they had taken on board from the school instantly mounted the mast and lowered the royal, and at the next glance of the pilot to the mast head, he perceived that the sail had been let down. He exclaimed, "Who's done that job?" the owner, who was on board, said, "That was the little fellow whom I put on board two days ago;" the pilot immediately said, "Where could he have been brought up?" The boy had become a great favourite on board the ship, from his activity and readiness to undertake any service, whether dangerous or painful or not. The same gentleman has called upon me, to inform me how satisfactorily the boys have behaved on board of other ships. Those boys are bound in the same manner as able-bodied seamen in South Sea voyages, and in a favourable voyage a boy may make as much as 30*l.* or 40*l.* I had been in the office after a boy had been in and received in the office of this gentleman 35*l.* I think it would be desirable to have a contract for hiring and service without premium instead of the usual indenture, and I would not permit this contract to become a cause of settlement, as ordinary apprenticeships are.

SIR, *Stepney Union, Limehouse*, 20 *July*, 1840.

THE enclosed return of apprentice-fees for three years previous to the formation of the Union, and for the three subsequent years, shows an expenditure for the former period of 222*l.* 9*s.* 6*d.*, and for the latter of 101*l.* 14*s.* Of this last sum a considerable portion (60*l.*) was paid in 1837 for the binding of twelve boys to the sea service, under the Merchant Seamen's Act. The remaining portion (41*l.* 14*s.*) was paid for *second apprentice* fees, due on bindings made previously to the Union. With the above single exception in 1837, the Board of Guardians have uniformly abstained from binding any apprentices, regarding parochial apprenticeship as a vicious and exploded system. As a proof that no necessity has existed for having recourse to it, I may state that in Midsummer quarter, 1837, we had eighty-five boys, between the age of nine and sixteen years, and in the corresponding period of 1840 not more than sixty-three.

The moderate amount of expense incurred under the head of apprenticeship, previously to the Union, shows that this system was not adopted to any great extent within this district, and the result of the inquiries which I have made in regard to the well-

being of the children bound previously to 1837, induces me to think that a more minute inquiry would not establish the existence, on any extensive scale, within this neighbourhood, of the evils which have undoubtedly been produced by pauper apprenticeship in many parts of the country.

Perhaps one of the causes of this may be the ready vent which is here found for obtaining employment for youths in the fishing trade and the sea service. Among persons engaged in these occupations, complaints of ill-treatment are very rare. The guardians always make a point of separately examining the master and the apprentice, whenever application is made for the second apprentice fee, which becomes payable three years after the binding, with the express purpose of ascertaining the condition and conduct of the parties, and it is generally remarked with satisfaction how healthy, robust, and cheerful the sailors and fishermen appear; and indeed the contrast of their appearance to that of youths bound to shoemakers, tailors, weavers, and others, living in crowded neighbourhoods, is very striking.

Since the separate establishment for children at Limehouse has been in operation, we have occasionally received offers from parties to take apprentices at a premium, but on inquiry it has generally appeared that too much importance has been attached to the receipt of the small fee to admit of the prospect of a favourable issue as regards the happiness and welfare of the children, and such offers have been always rejected.

The fact of the absolute abandonment of the system by the Board of Guardians may be taken as evidence of a settled conviction of its impolicy among a class of persons, many of whom, in the character of churchwarden or overseer, have had personal opportunities of observing its working in former years.

Since the arrangements for the training of the children have been matured, we have experienced great facilities in disposing of the children without a premium. In regard to the sailor boys, no premium is now paid, but only an outfit provided; and if the boy and his employer mutually approve of each other after a trial, a voluntary binding takes place, to which the Board are not parties. They endeavour, however, through the master of the children's establishment, to secure for the boys fair and reasonable terms.

I am inclined to think that it would be found a great benefit to the labouring classes if the stamp duty on indentures of apprenticeship were abolished as regards certain trades, as parents in humble circumstances, and more especially widows, would thus obtain means, now practically denied to them, of placing their children in situations for a fixed period of years; and one great inducement to throw the burthen of their maintenance on the public would be thereby removed.

It is a somewhat curious fact, that when once children become the inmates of a public establishment, such as that at Limehouse, the prospect of success in life of the orphan is in general much better than that of the child with parents, who are too frequently in the habit of obstructing the advancement of their children by injudicious interference with them in the situations procured for them. This latter evil might probably be diminished if additional facilities were afforded to the poor for placing their children in situations of their own selection.

I have the honour to be, Sir,
Your most obedient servant,
(Signed) WM. BAKER, Jun., Clerk.

Jas. P. Kay, Esq., M.D.,
Assistant Poor Law Commissioner,
&c. &c. &c.

STEPNEY UNION.

Apprentice Fees — Three Years previously to the formation of the Union.				Apprentice Fees — Three Years subsequently to the formation of the Union.			
		£. s. d.	£. s. d.			£. s. d.	£. s. d.
Mile End Old Town	Year ending Easter, 1835	18 8 0		Mile End Old Town	Year ending Easter, 1838	38 4 0	
	,, ,, 1836	22 6 0			,, ,, 1839	12 10 0	
	,, ,, 1837	48 16 6	89 10 6		,, ,, 1840	8 8 0	59 2 0
Limehouse . .	,, ,, 1835	10 0 0		Limehouse . .	,, ,, 1838	12 2 0	
	,, ,, 1836	19 12 0			,, ,, 1839	..	
	,, ,, 1837	15 0 0	44 12 0		,, ,, 1840	2 2 0	14 4 0
Ratcliff . . .	,, ,, 1835	..		Ratcliff . . .	,, ,, 1838	14 4 0	
	,, ,, 1836	..			,, ,, 1839	2 2 0	
	,, ,, 1837	..	41 4 0		,, ,, 1840	2 2 0	18 8 0
Shadwell . . .	,, ,, 1835	12 6 0		Shadwell . . .	,, ,, 1838	5 0 0	
	,, ,, 1836	4 2 0			,, ,, 1839	..	
	,, ,, 1837	..	16 8 0		,, ,, 1840	..	5 0 0
Wapping . . .	,, ,, 1835	10 8 0		Wapping . . .	,, ,, 1838	5 0 0	
	,, ,, 1836	10 5 0			,, ,, 1839	..	
	,, ,, 1837	10 2 0	30 15 0		,, ,, 1840	..	5 0 0
			£222 9 6				£101 14 0*

* Premiums paid with 12 boys apprenticed by Board of Guardians . £60 0 0
Second Apprentice Fees 41 14 0
£101 14 0

Mr. Walter Macleod.

How long were you schoolmaster at Mr. Aubin's children's establishment at Norwood?—Two years.

In that period you were one of the chief agents in the improvement of the moral and religious training and instruction of the boys. You had abundant opportunities of ascertaining the influence of that education on the degree of facility with which the Boards of Guardians procured situations for the children, and on the period during which the children retained those situations. Will you state what is the result of your experience, describing what you remember to have occurred on your first arrival at Norwood, and what effect the improvements appeared to have produced when you left?—On my first arrival at Norwood the schools contained several boys above 14 years of age, a great many between 13 and 14, and I think the number between 12 and 13 formed the greatest portion of the upper school. Now there are 4 or 5 boys in the first class who are 13 years of age, the rest in that class are between 12 and 13, or under 12; the second and third classes consist of boys for the most part between 10 and 11, and the other classes of still younger children. I took an average of the age of the children in the first three classes sometime ago, and the average age was about 9 years and a half to 10, not more. I do not know, personally, much respecting the comparative frequency of their return from service before the improved management of the school, but I have heard from the boys themselves that their companions had frequently, and some of them repeatedly, returned from service, and I found in the school on my arrival many boys who had been sent to service, but had returned from it, being unable to retain their situations. Since the improvements had been carried into execution, the boys have so rarely returned from service to Norwood that I cannot at this moment call to mind more than two instances in the classes I superintended, which were the most advanced classes of the school. One of these boys was ill used by his master, and left his service on that account, and the other returned, because of want of strength for the employment of shoemaking, to which he had been sent. The Guardians generally selected boys for service from my classes, because they required them commonly to have made a certain degree of proficiency, which was tested by requiring them to read, and sometimes to write and cipher.

Among those who have been sent to service, both boys and girls, many visit us for a day at the school. They commonly present themselves cleanly and well dressed, and speak with satisfaction of the treatment of their masters, and of their progress in the knowledge of their trade. Their visit to Norwood is always a cheering sight. They are surrounded, as soon as they appear,

by groups of their old companions, who are full of earnest inquiries of what has happened to them since they left, and how they like their places in service. The excursion to Norwood seems a source of pleasure to them. They appear happy and contented with their lot; fresh looking and in good condition.

I not unfrequently meet in the streets of London boys or girls who have been trained at Norwood, and who immediately recognize me, and always run up to me, and ask many questions about some of their old companions, with whom they were particularly intimate when at Norwood. I have then opportunities of inquiring whether they have retained their places in service, and whether they are contented. They are, as far as I have observed, satisfied with their situations, cheerful, and in good health.

The boys are chiefly employed by tailors, shoemakers, and on board merchantmen, fishing smacks, and coal ships. They are well prepared for those occupations in the tailors' and shoemakers' shops, and under the drill master on the ship at Norwood.

Supposing the training in industry to be discontinued at Norwood, and the former method of instruction restored, what consequences would you anticipate?—I should anticipate, that the children being disgusted with labour, by such useless and monotonous employments as bristle sorting, and being left chiefly to the management of boys of their own age, would soon become wild and ungovernable, would daily abscond into the woods, and learn vagabond habits, and would, when sent to service, be found ignorant, idle, stubborn, without any skill in manual labour and habits of industry. Their vicious tempers and rude manners, their abuse of their master's property, and turbulent dispositions, would occasion their being in a short time returned upon the hands of the Guardians. The school would lose its reputation, and, instead of employers willingly receiving them into service, the best employers would refuse to take them, and the lowest would require a premium with them. Gradually the numbers of the children in the school would increase, because they would not get out to service till a later age. The first classes would consist of boys from 12 to 14 and upwards, instead of (as in the three first classes) boys whose average age is 10.

Frederick George Aubin.—You are the proprietor of the establishment for the training and maintenance of pauper children at Norwood. How long has this school been established and managed by you?—It has gradually grown up in the last 19 years, during which time the children who were formerly put out to nurse under Sir Jonas Hanway's Act, in the cottages of Norwood and other villages, have been gradually assembled in my establishment; they were formerly placed with poor nurses, in groups of five or six in each cottage. The people with whom they were placed were little removed from paupers themselves,

and abuses in the management of the children occasioned their being gradually transferred to my care. At first I was chiefly charged by the churchwardens and overseers with the maintenance and clothing of the children, and their attention, at that time, appeared to be confined to this object.

After some years I was encouraged by certain of the parishes to adopt the National system of instruction in one school, and the British system in another, and at length to have an infant school. The employments were chiefly selected with a view to render the maintenance of the children less onerous, and we avoided all work which required skilled and therefore expensive superintendence. Our employments were therefore bristle-sorting, and 'hook and eye' making for the boys. As respects the girls, the churchwardens and overseers never allowed us to teach them, as we now do, all the details of domestic labour and management. They were formerly imperfectly taught sewing and knitting, but little more.

Since the Unions have been formed, and especially during the last two years and a half, since the Poor Law Commissioners have afforded us the assistance of their advice and direct interference, those changes have occurred which are described in your Report, and other improvements are now in progress.

During the last year and a half the effects of this improved training seems very evident in the greater ease with which the guardians procure the children situations in service. Formerly we had a great number of children in the school of the ages of 14 and 15, and there were still greater numbers in the school above the age of 13. Now, the only children we have above the age of 13 are those who (since the out-door relief of the poor has gradually been diminished by the guardians) are sent in for limited periods, while their parents are in the workhouses. The great body of the children are much reduced in age, we have very few who are 13 years of age (with the exceptions I stated), and the first three classes are on the average under 10 years of age.

Formerly, when the idea of keeping them in good health by sending them into the country only prevailed, we were constantly troubled by the return of great numbers from service. Since they have been placed under skilful superintendence, and taught useful trades, very few return; certainly not five per cent., including even those who remain very short periods in the establishment.

I attribute this change to the fact, that one main design of our whole arrangements, under the guidance of the Poor Law Commissioners, is to fit them for service, by giving them a cheerful idea of labour, to which object a large part of the lessons of the school is directed, and to their being constantly employed in all the domestic duties of the household, and set to work in the

workshops, under skilful superintendence, on trades which render them useful servants, journeymen, or seamen.

The girls are employed as described in your Report, and are now so habituated to daily labour in scouring, bed-making, cooking, washing, ironing, mangling, cutting out, sewing, knitting, &c., that they are both by habit, and by the skill they have acquired, prepared to undertake the duties of "maids-of-all-work," and to bear with contentment the labour of domestic servants in a very humble sphere.

The moral training of the children is improved since, by direction of the Commissioners, the servants have been selected by the chaplain, together with myself; and the teachers have been enabled, by the increase of their number, to pay more constant attention to the characters and habits of the children. The children are much more easily managed. Formerly a great many used to abscond and go to London. This does not now occur, except in cases of children who have been recently picked off the streets, and sent to the school at ages above the usual average. As the children are now more easily managed by me, I have no doubt they are more tractable to their masters in service. We have no complaints from their masters, excepting of the class of which I have spoken before.

Our chief difficulty now is with boys and girls of more advanced age, who (since out-door relief is diminished) are sent to Norwood by the guardians for a short time. They come extremely ignorant, rude, and vicious in their habits, very insubordinate, and we can under such circumstances, and amidst such great numbers, by no means teach them in a single year all they ought to know, or produce on their characters and habits such a change as we could desire. These children will always be more or less a source of evil in the school, and will be a cause of trouble to us when they leave the school.

I feel confident that the improvement in the training of the children, which has occurred since the Poor Law Commissioners' interference, will enable the guardians to settle the children in future without giving premiums for their apprenticeship. If the Commissioners were to prohibit by an order the granting of any premiums with pauper children (excepting those disabled in some way), the guardians would have no difficulty in finding places for the children at as early an age as at present. The East London Union has already given up granting any premiums. I do not know the practice of the other Unions.

The premiums always brought to us a great number of the lowest workmen. The higher the premium the greater were their numbers, and the lower the character of some of them. At this very time a woman, who is slightly deranged, has been spreading

a report in London that one of the city companies is disposed to give a premium of twenty pounds for the apprenticeship of her son. In consequence of this report, we have had more than a hundred people here in search of the premium. She frequently comes with them herself, and sometimes in a state of intoxication. Many of the applicants are workmen of the lowest class, and with nearly all, the object of the application plainly is, to secure the premium without any real need of the services of the boy.

This case affords the best illustration of the effects of offering premiums in the apprenticeship of pauper children. A class of tradesmen are encouraged, who derive a considerable part of their income from premiums with children whom they take as apprentices, but whom they almost always neglect, and frequently ill use, and drive from service as soon as they can do so on any plausible pretext.

If the premiums were altogether given up, those tradesmen only would take the children who had really need of their services. And the children are now so well prepared to do their duty to their masters, that the guardians would have no difficulty in finding places for them without any premiums.

Mr. James Roberts examined.

I am relieving officer of the East London Union. I was beadle of the parish of Aldgate during four years before the formation of the East London Union. I had then the best opportunities of observing the means that were adopted to get the pauper children into service. They were apprenticed by the parish, a great number more boys than girls; the girls were not very frequently. We used to give a premium of 4*l*. 2*s*. and some clothing with the boys. They were for the most part apprenticed to very little tradesmen, and to persons working for their own livelihood, who wanted the premium quite as much as they wanted the services of the children. The number we apprenticed was by no means great: I do not think we apprenticed more than six during the time that I was beadle, the rest were sent to service without premiums as errand boys, and so forth, and some went to sea. I have heard Mr. Booker, the beadle of Bishopsgate parish, say, that before the formation of the Union they used to bind a great number of children apprentices in that parish. I am aware that they have a considerable charity fund in the parish of Cripplegate for the purpose of apprenticing poor boys. That I consider to be a very different thing to pauper apprenticeship. Since the formation of the East London Union we have discontinued giving premiums about 12 months, and we for the most part send the boys to sea; they being trained to the sea service to a considerable extent by the discipline of the school at Norwood, and those

are found more acceptable boys on board the merchant ships than other boys. They chiefly go long voyages. We are sure that we have greater facilities in procuring them places on board of ships in consequence of the previous training which they obtained. We give an outfit of clothing, amounting to 4*l*., with each boy. We have not above 20 boys, and about 15 girls above 12 years of age at Norwood, out of 235 children, so that we get them into service or to sea for the most part at 13 years of age, or younger, without premiums, and simply with an outfit of clothes. The outfit of the girls costs about 2*l*., depending in some measure upon the kind of situation to which they are sent.

Mr. Alexander John Baylis examined.

I am clerk of the East London Union. I had opportunities of observing the system of parochial apprenticeship pursued in one of the parishes of the East London Union before the parishes were united. The class of persons applying then for apprenticeship appeared to me to be of the lowest description, principally, I should say, tailors and shoemakers; and I can have no doubt, from my observation, that their more particular object in applying was to obtain a small sum of money by the premium to assist them in their business. I think the character of the applicants is not much improved now, because they still come with the impression that they are to receive premiums. The number of applicants has of late considerably decreased in our Union; I imagine from the circumstance that we announce that we have discontinued premiums. The reason why the Board discontinued the giving of premiums was because they found that it got the children into the worst kind of places. Still the Board consider themselves placed in a situation of embarrassment, from the fact that adjoining parishes and Unions still continue to give premiums; and, therefore, as the nature of the training at Norwood is not very generally known among the tradesmen in the parishes at present, they grumble at not receiving the premiums that are given elsewhere.

ALEXANDER JOHN BAYLIS.

The preceding evidence appears to me to prove that the training of pauper children in religion and industry may be conducted so as to remove all the difficulties which might have been experienced in getting rid of the custom of giving premiums for the apprenticeship of these children.

The premium was an inducement to low tradesmen who had no need of the services of the children to offer to take them with-

out having the means or the intention of teaching them trades; and the security, hitherto provided by the inquiries made by the churchwardens and overseers, or by the relieving officers, ***has not been sufficient*** to prevent the apprenticeship of pauper children to such persons. If the inducement were withdrawn, the applications from such persons would cease; and the evidence shows, that the careful training of the children in religion and industry will cause their services to be sought by persons who really have need of them, and who, by rendering the children useful in their household or in their handicrafts, will fit them to earn their livelihood by independent labour.

The efficiency of arrangements for the training of pauper children may safely be tested by their effects (after a sufficient period of trial) in increasing the facility with which the guardians procure for the children eligible situations in trades and domestic service, and by the infrequency of their return from service, on account of want of industry or skill, or because of ignorance or immorality.

Collateral proof of this efficiency may be sought in the absence of any premiums for the apprenticeship of children not physically disabled, and in the age at which the children go to service.

The necessity for giving any premium being removed, it will speedily fall into disuse; but the desire of a Board of Guardians to abandon the practice may suffer some obstruction, if the neighbouring parishes (whether from neglect in the training of their children, or from other causes) persist in pursuing the former practice. It may be expedient that you should consider, in reference to each district of your Assistant Commissioners, whether it is desirable to withdraw your sanction from the custom of giving premiums for the apprenticeship of pauper children.

The evidence shows that several Boards of Guardians have abandoned the practice in London. Others only wait to be assured that they will suffer no inconvenience from the want of the concurrence of neighbouring Boards.

In my Report, dated 30th June, 1836, I gave some account of the extent to which the system of the compulsory apprenticeship of pauper children prevailed in the Incorporated Hundreds of Norfolk and Suffolk before the passing of the Poor Law Amendment Act. I have no doubt the expenses attending that system, including the premiums, legal and travelling expenses, the cost of the outfit, and previous temporary residence of the children in the workhouses, amounted to £20,000 per annum in the two counties of Norfolk and Suffolk, some years previously to the introduction of the amended law. Not only were the regulations connected with this system abandoned, whilst I acted as your assistant in those counties, but the premiums granted there were reduced to

a few hundred pounds per annum, though the number of the children maintained in the workhouses was *considerably less* than under the former administration of the law.

The absence of any embarrassment arising from the total and immediate removal of the complicated system of apprenticeship, which had prevailed in those counties, and my experience of the effects of the improved training of the children in the metropolitan district, in facilitating their removal from the workhouse to service, lead me to assure you that the careful training of pauper children may be substituted for the practice of giving premiums for the apprenticeship of the children, and that this practice ought to be abandoned, excepting in cases of physical defect.

I think it may still be desirable to have a form of contract between the guardians of the poor and the masters to whose care the children are committed, setting forth the services to be performed by the child, and the instruction, clothing, maintenance, and ultimately the wages which the child is to receive from his master, during the several years of his service, but settlement should not be acquired by such hiring or by apprenticeship.

The relieving officers and masters of the workhouses are generally employed in examining into the character of the persons who apply for children, as servants and assistants in handicrafts. I have long been of opinion, that it is desirable to appoint an officer for a district of metropolitan Unions, to assist the relieving officers in the discharge of this duty, and in subsequently visiting the children during the period of their servitude, and reporting to the guardians at certain intervals their condition and progress in the knowledge of their trade.

The settlement of those children in a useful trade, who have been trained with so much care by the guardians, would be facilitated and rendered more free from abuse and error if an officer, qualified by his knowledge of the characters of the children, by his acquaintance with the principles on which their training has been conducted, and by a strong desire to promote their welfare, were charged with the duties connected with the preliminary inquiries and subsequent visitation of the children. Such an officer might be supplied by you with forms of inquiry, which he should be directed to fill up for the information of the guardians, both previously to the hiring or apprenticeship of a pauper child, and at every visit which he might be required to make during the period of its servitude.

The inspection of the Tables which accompany this Report, will show you that the great majority of the children maintained in the workhouses and pauper schools of London and its vicinity, are without any natural protectors, or without a father, being illegitimate, or orphans, deserted by their father, or deserted by both

parents, or the children of men undergoing punishment for crime, or the children of persons dependent on parochial aid, on account of mental or bodily infirmity, or children of widows.

In almost all these classes, the guardians are placed in *loco parentis* to the pauper child, and ought (till the child is sixteen years of age) to derive from the law parental authority over him. The exercise of parental superintendence over the well-being of these children, with the vigilance with which a wise and tender parent would watch the progress of his child, cannot regularly occur without the employment of a well-qualified agent.

If it be your pleasure to charge the relieving officers with this duty, I would urge the importance of supplying them with instructions as to the best mode of conducting the preliminary inquiries, and of requiring that their visits to ascertain the condition of the children be made within certain periods, and that their reports be presented in a form prepared for that purpose.

Your Assistant Commissioners would be enabled, by inspecting these reports and a register of the visits to each child, to ascertain whether this duty had been regularly performed.

The evidence on the effects of the improved training of pauper children on their settlement in a course of independent industry, would be more full and satisfactory if the law had enabled you to give effect to the wishes of the Boards of Guardians of many of the London Unions, who have been desirous to unite for the combined management of District Schools.

The improvements which I have related in the early part of this report have been made by the Boards of the largest Unions in London, where the great number of children assembled in the workhouses has enabled the guardians to adopt that organization which is contemplated in a District School, and to appoint officers to the several departments of labour, domestic service, instruction, and training.

Thus the parish of Lambeth has commonly 450 to 500 children at its children's house at Norwood.

The Greenwich Union Board have from 300 to 350 children in their new workhouse. The Edmonton Union Board have about 200 children in their school of industry at Enfield.

The Stepney Union Board had from 380 to 450 children in their Limehouse school of industry.

The following letter from the clerk of the Stepney Union may serve to show how the population of certain of the Metropolitan Unions, by rendering the number of pauper children maintained in the house comparatively much larger than in any rural Union, facilitates the adoption of expedients for the training of these children, with due attention to economy.

In the Stepney Union, as many children are assembled as are contained in the workhouses of six or seven moderate-sized rural

Unions, and Mr. Baker's statement will make it apparent that the establishment of a District School for six or seven country Unions would be attended with a considerable saving, in consequence of the reduction in the number of schoolmasters and schoolmistresses.

Stepney Union, Limehouse,
30th May, 1840.

DEAR SIR,

I THINK it right to forward for your inspection the enclosed copy of a return recently prepared by direction of the Board of Guardians, and which will probably have a tendency to remove the misapprehension which appears to have prevailed in many quarters, as to the supposed increase of the average cost per head for pauper children, in consequence of a more liberal provision having been made for their education in comparison with the cost of maintenance of adult paupers. To such an extent has misconception existed on this subject, that it has actually been supposed that the expense of maintaining a child on the improved system has been double that of an adult.

I remain, dear Sir,
Your most obedient humble servant,
(Signed) W. BAKER, Jun., Clerk.

Jas. P. Kay, Esq., M.D.,
Assistant Poor Law Commissioner,
&c. &c. &c.

Stepney Union.

"Return showing the average weekly cost per head of the paupers in each of the workhouses and the children's establishment, for the quarters ending at Christmas, 1839, and Lady-day, 1840; distinguishing the expenses incurred for food and clothing, and for the establishment charges applicable to each house."

	Description of Paupers.	Food and Necessaries.	Clothing.	Establishment Charges.	Total average Weekly cost per Head.
		s. d.	*s. d.*	*s. d.*	*s. d.*
Ratcliff and Mile End Workhouses	Aged and infirm men and women and able-bodied men	3 7	0 3	1 4	5 2
Wapping ditto . .	Able-bodied women and infirm women	3 1½	0 4½	1 2	4 8
Limehouse Children's Establishment. . . .	Children and infants	2 4¼	0 5¼	1 5¼	4 3
	Average . .	3 0¼	0 4¼	1 3¾	4 8¼

The average cost per head for maintaining, clothing, and educating the children, including all salaries of officers and other establishment charges, is considerably less in the children's establishment than in the houses for the adult paupers; and the establishment charges exceed the weekly average of the other workhouses only in a very slight proportion.

The extension of the improvements, which have been adopted by such Boards as that of the Stepney Union, is prevented, by the want of power to combine Unions for the establishment of District Schools.

The Strand Union Board have long been desirous to remove their children from a contractor's establishment, where they are now maintained, and to possess a school of industry under their own management, or a District School conjointly with some other Board; but they have postponed taking any decisive steps for this purpose, because they have anticipated that the Legislature would give to the Poor Law Commissioners the power of enabling Boards of Guardians to combine for the support of District Schools.

The West London Union has repeatedly sought to enter into such combined arrangements with some neighbouring Unions, but has failed in every effort to accomplish this design, because the law affords no facilities for this purpose.

I have always understood the Guardians of the Kensington Union to be favourably disposed to the establishment of a District School.

Certain of the suburban Unions of Surrey and Middlesex, and particularly the Richmond Union, have communicated their desire to join in the establishment of District Schools for their pauper children.

The views of such Boards respecting the comparative expense of District Schools are set forth in the following resolutions of the Alnwick Union, for which I am indebted to Sir John Walsham:—

Alnwick Union.

At a meeting of the Board of Guardians of the Alnwick Union, held in the town-hall in Alnwick, on Saturday, the 14th day of April, 1838, at eleven o'clock in the forenoon, it was, amongst other things, resolved as follows:—That the workhouse committee's report be adopted, and which is as follows, so far as relates to District Schools:—

District Schools.

The workhouse committee of this Union have taken the subject of the education of the children of the poor in the workhouse into their consideration, and they are satisfied that great advantages, in point of economy and of benefit to the children themselves, would arise from the adoption of District Schools,

At present each Union does or ought to appoint a master and mistress to instruct the boys and girls in reading, writing, and arithmetic, and in knitting, sewing, and other useful branches. This is necessarily attended with considerable expense to each Union, from the small number to be taught. In this Union, the children may amount to about thirty, of which about fifteen are at school, the rest being too young. These fifteen are instructed by one of the paupers, with credit to himself; and the girls are also taught to sew and knit in the house by one of the inmates; so that this Union is not at present put to any great expense; but if a regular master and mistress should be required to be appointed (which Sir John Walsham stated would have to be the case in a little time, when the other details were better understood, which are more important at present to be attended to), the cost would be considerable.

Should such an arrangement become necessary, this committee have no hesitation in recommending the adoption of one school for a district of Unions, where one efficient master and mistress, with teachers, might carry into effect some good method of education,—useful in after-life, and such as to make it likely that the person so educated would avoid the situation of a parish pauper, instead of being brought up in a workhouse, surrounded with all the ideas and practices of living upon a system of either in-door or out-door relief. In point of economy, a saving would necessarily arise in a District School compared with Union schools; for, in the former case, by a small contribution from each Union, a much better salary, at a less cost to each Union, could be afforded, and, of course, much more efficient services secured, more system and regularity, and nothing to detract from the sole attention which a school establishment requires. With respect to clothing and maintenance, until the children were old enough to go into the world as apprentices or servants, or in any other capacity, that would necessarily be much the same as the maintenance and clothing in the Union workhouse.

Taking all these matters together, we have no doubt much advantage would be derived by the establishment of a District School for Unions.

It is scarcely necessary to add anything to the objection which might be urged on the separation of children of a certain age, fit for these schools, from their parents, as that is the common practice with fathers and mothers in independent circumstances, who, far from considering it a hardship, generally look upon it as a great benefit to the child to have it sent from home to a proper school, thus to secure it a good education as its best fortune and protection in after-life.

By order.

(Signed) Wm. ——, Clerk to the Board.

Some needless alarm has been excited by the apprehension that the establishment of district schools for pauper children would render necessary the erection of new buildings, and thus occasion considerable additional outlay. A little explanation may remove this alarm. In every district in which such a school might be desirable, some old mansion might be hired at very slight cost. In many districts the combination of the parishes into Unions has left some workhouse vacant, which might be obtained at an easy rent. Very slight alterations would adapt these buildings to the reception of the children, and probably no alterations would be necessary for the domestic arrangements of the household; but the want of a convenient room for instruction might, in some cases, suggest the propriety of erecting a school-room. In most mansions, however, the dining-room or hall, with some adjacent small rooms, would suffice; and it is only in small parochial workhouses that the building of a school-room would be requisite.

I am aware that you do not contemplate the erection of additional buildings for the establishment of district schools.

The removal of the children from the Union workhouse would provide the guardians with the means of improving the classification. In several workhouses the wards for the separation of idiots and lunatics, not dangerous, are either of insufficient capacity, or are not sufficiently distinct from those of the adult inmates; the idiots have accordingly been sent to asylums at a considerably increased expense. In others, the arrangements for the reception of the extremely aged and decrepid would be improved, by a complete separation of this class from the inmates only partially disabled by age and infirmity. In certain workhouses, a class of females is so unruly and insubordinate as to render their inhabiting a separate ward and yard requisite for the preservation of decency and order. The experience of Boards of Guardians has shown more clearly the extent of the accommodation which it is desirable to provide in workhouses for the reception of the sick; and the desire which some boards feel to increase this accommodation would be satisfied without additional outlay, if the children were removed to a district school.

The tables appended to this report, and the experience of the London Unions, show that the pauper children are chiefly orphans, illegitimate, or deserted children, or the children of parents permanently resident in the workhouse. In London, it is not found necessary to provide any accommodation for children in the workhouses in those Unions in which the children are sent into the counry, according to law. Neither is it found that natural ties are severed. The great majority of these children are without friends or protectors, or their protectors are disabled.

In the latter case the children are permitted to visit their friends from time to time.

Such of them as have relatives commonly suffer from this connexion. When these relations visit the children at Norwood, they often present themselves drunk. It is difficult, after they have come some miles, to refuse the interview, though it subjects the child to listen to profanity and evil counsels. If they are permitted to take the children a walk, for the sake of uninterrupted intercourse, they delight to carry them to the nearest tavern and to persuade them to take spirits. Mr. Aubin assures me that the most common mode in which they contrive to show any kindness to their little relations is, by bringing them coarse sweetmeats, which generally make them ill, or by inveigling them to the tavern or beershop.

Their visits have accordingly of late been the subject of greater concern. They have been admonished that their intercourse with the children must be conducted consistently with the rules of the establishment, and have been informed that if their visits are found to lead the children to immorality, they will be in some degree restrained by the presence of an officer of the household. This expedient, however, has not been resorted to, and would not be adopted excepting in cases in which admonition had been repeatedly tried, and had failed to produce the proper effect.

Since the children will only in rare instances be separated from their friends, the arrangements for the training of pauper children in district schools will not interrupt the play of those natural sympathies which, in well-conducted families, are such powerful agencies in leading the children to virtuous habits.

The beneficial results of the improved training of pauper children in London, in procuring for them an earlier settlement in eligible situations in service and trades, are so generally admitted in the metropolitan district, that few or no objections are made to the slight increase of expense which the improved arrangements have occasioned, even when adopted in schools of individual Unions, unabated by the saving which might be effected by combinations of Unions. Apprehensions of a different kind have occasionally been expressed, which are so ably discussed in a letter written by Geo. F. Young, Esq., the chairman of the Stepney Union, that I beg permission to incorporate his letter in this Report.

GENTLEMEN, *Limehouse, May 12th,* 1840.

As chairman of the Board of Guardians of the extensive and populous Union over which, from the period of its foundation, I have had the honour to preside, I am persuaded that I shall not require apology for venturing to offer a suggestion connected with perhaps the most interesting portion of the measure, now

under the consideration of the Legislature, for the continuance of the Poor Law Commission, viz., that which relates to the education and training of pauper children.

Concurring cordially in the enlightened views developed on this subject by Dr. Kay in your Fourth and Fifth Reports, and in the more recent exposition of similar sentiments by Mr. Tufnell, in the appendix to that recently published, I have from the commencement of my connexion with the Stepney Union regarded it as one of the most imperative of the duties devolving on me, to urge on the special attention of successive Boards of Guardians the sacred nature of the obligation imposed on them, to make suitable provision for the education and training of the pauper children of the Union; nor have I failed to press on them the encouragement to a liberal if judicious outlay for this purpose, derivable from the consideration of its embracing the truest economy in the results that may confidently be anticipated from its prudent application; no conclusion being more demonstrable to my own convictions than that while all improvements in Poor Law Administration, applied to the adult population, will be little better than palliations to an evil too deeply rooted to admit of effectual cure, a sound and wholesome system applied to the young, offers a reasonable probability of eradicating from the mass of the people those vicious principles and degrading habits to which the prevalence of pauperism, with its consequent burthens, are mainly to be attributed. I consider it equally creditable to the gentlemen with whom I have acted, and fortunate for the public, that in these sentiments I have received the almost uniform concurrence and support of the guardians; and you are doubtless aware that, under their directions, aided by your sanction, the Stepney Union at present trains and educates its 400 pauper children in a separate establishment, removed from the contaminating influence of pauperism, and on a system which has received the unqualified approval of many most competent and enlightened judges by whom it has been visited. Of its success I will only say that, in spite of the obstacles inseparable from a novel and difficult attempt, its results, even in its present unavoidably imperfect state, are such as to offer the most encouraging inducement for the extension of the principle, under those improvements which experience will suggest, and an amended state of the law may facilitate. But already is one consequence developing itself, which while I confess I have always anticipated, and even desired it, appears to me to require serious and immediate attention to prevent its becoming a source of embarrassment. It is to this consequence, and the manner in which it should be met, that I am induced very respectfully to invite your consideration.

At the first establishment of our schools, a very large proportion of the children consisted of the most unpromising class that

ever were submitted to a course of mental culture and moral discipline.

Ignorant of all that is good, but trained and practised in all evil, unintellectual, debased, and demoralized, the work of instruction and reformation sometimes appeared almost hopeless. But the rapid improvement of the children under a system of religious and moral teaching and of industrial training; their general decency of deportment, the proofs they afford of the influence of sound principles; and the apparent state of comfort in which they live, the simple result of cleanliness, discipline, and regularity, having attracted observation, and are now beginning to excite out of doors a feeling of jealousy. By opponents we are charged, though really without reason, with over-educating the children; but even well-intentioned friends are expressing apprehension, that the pauper will receive a better education than the child of the independent labourer. For myself, I confess, I rejoice at this alarm, perceiving in it, if judiciously met, the means of stimulating to more general interest in the cause of education throughout the district. But it is at the same time evident that, if disregarded, it may produce embarrassments which might seriously impede the progress of our efforts, by exposing them to unpopularity and opposition. The obvious reply to those whose complaint is founded, not on absolute but relative objection to our system, is, "extend and improve education among the class of independent labourers,"—and to exertions with this view I am convinced we shall apply a powerful and ultimately an effectual stimulus. But the answer is conclusive only to the rich objector, through whose instrumentality in the existing state of society the means of such improved education can alone be provided. To the poor parent, who would vainly attempt to devise or perfect the machinery requisite for the establishment of a good training school, it would be but mockery. I propose then that the objection should at once be boldly met, by throwing open in populous neighbourhoods, and of course under proper regulations, Union or District Schools for the admission of the children of independent labourers, on payment of an equivalent rate of charge.

It would occupy too much time were I to attempt to enforce the expediency of such a provision by all the arguments which have been impressed on my own mind by reflection, aided by much opportunity for observation and inquiry; but I cannot refrain from urging that, in addition to the benefits it would extend to the general population, and the conclusive answer it would afford to objectors, it would be likely to confer inestimable advantage on the children to whom the guardians of the poor stand in the relation of parents; because if kept altogether in seclusion from all associations, except those of their own restricted and peculiar society, I already perceive some danger of their be-

coming a separate caste, in some respects unfitted for mixing hereafter in the world, and liable to the taint in the estimation of others of that pauperism of which every vestige should if possible be banished from observation or remembrance. The train of reasoning, by which this view of the question may be enforced, will at once present itself to the mind, and appears to me to possess peculiar importance in its reference to those moral influences on which the formation of character, and thence the direction of conduct, will be found to depend. But on this I must not enlarge.

In conclusion, gentlemen, in respectfully expressing an earnest hope that if not prepared at once to sanction the practical application of the plan I have ventured to suggest, you will at least not permit the present opportunity to escape for obtaining from the Legislature the requisite powers for hereafter permitting the experiment. I would assure you that in offering the suggestion, I am prompted alone by a conscientious conviction that it is calculated, if carried out, to confer an important benefit on the poor children especially confided to your charge; on the independent labourer, who has indefeasible claims on your protection; on the rate-payer, whose interests you must naturally desire to maintain; and on society, the amelioration of the condition of which it is the first duty of all public functionaries, and of all who rightly estimate their obligation to God and to man, unceasingly to labour to effect.

I have the honour to remain, Gentlemen,
Your very faithful and obedient servant,
(Signed) GEORGE FREDERICK YOUNG.

To the Poor Law Commissioners for
England and Wales.

I can perceive how all the difficulties attending such an arrangement as that proposed by Mr. Young might be overcome, provided the guardians were enabled (by charitably disposed persons paying a weekly sum with every independent child) to extend the means of instruction in industry and in elementary knowledge, proportionately to the additional number of children admitted.

It is also evident, that the character of the discipline and training ought not to be in any respect changed, if the children of independent labourers were admitted. Nor should the training in any particular be partial. The children admitted to the daily routine (but not resident in the workhouse) should participate in every department of the training. The girls should share in the domestic work of the household, and pass through the various employments suited to their age, exactly as if they were resident. The boys should spend the same number of hours in the workshops, in gymnastic training, and on the mast, as the

inmates of the house. The school should be managed on a theory having a special relation to the training of pauper children; and if it were open for the reception of the children of any other class, the same discipline should be applied to them. Those who were permitted to avail themselves of the training in the school, in consequence of being nominated by subscribers of a certain annual sum, should not be induced to enter it by any sacrifice of the interests of the pauper children, but such admissions should be limited to those to whom the arrangements designed for the pauper children had the attractions which Mr. Young conceives they would possess.

If it became desirable to enlarge the school-room and increase the size of the workshops, subscriptions would be necessary, unless powers were obtained to derive the requisite funds from the poor-rate.

Wherever the establishments for pauper children have the advantage of such intelligent superintendence as that of the Stepney Union, and are managed by officers as discreet and faithful as these, the greatest benefit would be conferred on the children of the poor in the neighbourhood, if they were permitted to enter the school. If the law permitted the additional expenses to be paid from the poor-rate of the parishes to which the children belonged, or if the expenses were provided by subscription, I see no objection to the plan which is not counterbalanced by great advantages.

The district school, if situated in a populous parish, might thus provide for the instruction in industry and religion of a class of children, probably not less neglected than those who are the special objects of the care of the guardians.

On the other hand, no such advantage can be afforded while pauper children inhabit the same workhouse with the adults, unless the guardians are authorized to build school-rooms and work-shops at such a distance from the workhouse as to establish a complete distinction between it and the School of Industry.

Schools of Industry in populous parishes in the neighbourhood of workhouses might be attended by the children from the workhouse and from the village, without risk of evil or embarrassment, provided the schools were conducted on the plan required for the preparation of pauper children for their duties in life, and especially for skilful labour. Such schools should, in all cases, be solely under the management of the Board of Guardians. I cannot deem it expedient to permit the pauper children to attend a school out of the workhouse, over which the guardians have not complete official control, excepting under circumstances so peculiar as to justify a departure from a general rule.

In this and preceding Reports I have now stated the chief

grounds on which experience in the operation of the Poor Law Amendment Act suggests,—

1. That the practice of granting premiums for the apprenticeship of pauper children should be discountenanced, and, as early as may be convenient, abandoned.

2. That the practice of granting premiums for the apprenticeship of pauper children to hand-loom weavers in a condition similar to those of Spitalfields should be prohibited by order.

3. That the reports presented to the Boards of Guardians by the relieving officers concerning the condition in life and character of persons desirous of taking pauper children into their service, or of receiving them as apprentices, should be made more systematically in a book prepared for that purpose, and should be preserved among the records of the Board of Guardians.

4. That the relieving officer, or in certain districts some officer appointed for a district of Unions, should receive more special instructions as to the visitation of pauper children during the period of hiring and service, and should make reports to the Boards of Guardians, at stated periods, concerning the condition of these children, in forms provided for that purpose.

5. That a contract for hiring and service, with an annually increasing remuneration, should generally be substituted for the ordinary indenture of apprenticeship.

6. That the success of such arrangements must mainly depend on the improvement of the pauper children in religion and industry, and that without such improved training, experience proves that great numbers of parish poor children fall into indolence, and remain dependent as paupers, or swell the catalogue of juvenile delinquents.

7. That the arrangements for the training of pauper children must, in the majority of Unions, continue to be defective if district schools are not established; but that experience warrants great confidence in the result of a training in religion and industry similar to that which has been pursued in such schools, provided it be made to comprehend the 50,000 pauper children of England and Wales.

Before I conclude this Report, I am desirous of reminding you how much advantage has been derived from occasionally assembling the masters of the schools at a conference of teachers, which has been held, sometimes at Norwood, sometimes at my own house, and once or twice at the house of certain of my personal friends, among whom, Mr. Henry Tufnell, one of the Lords of the Treasury, and my colleague, Mr. Edward Carleton Tufnell, have most kindly lent their aid.

You have honoured one or two of these conferences with your

presence, and we have reckoned among our guests some of the most sincere friends of elementary education.

At such meetings letters from the teachers on the progress of their schools, similar to those which I have embodied in this Report, have been read. Improvements in the method and organization of schools have been described and discussed in familiar conversation. An account has been given of the chief characteristics of foreign schools in different parts of Europe, and occasionally a lecture has been delivered on some subject of school instruction.

The teachers have partaken a substantial dinner, and we have strengthened our friendly relations. The results have appeared to be useful in cheering the masters in the prosecution of their arduous labours, in maintaining the *esprit de corps,* and in diffusing useful information.

My engagements in the summer and autumn of this year have been so numerous, that I have been compelled to postpone from time to time the gratification of assembling these worthy and useful men at a conference.

Our next conference will be held the day after Christmas-day, at the Training school at Battersea.

I have the honour to be, Gentlemen,
Your obedient servant,
(Signed) JAMES PHILLIPS KAY.

To the Poor Law Commissioners,
Somerset House.

TABLE 1.

Showing the Number of various Classes of Children receiving In-door Relief from certain of the Unions and Parishes in Middlesex, Kent, and Surrey, in the Month of July, 1838.

		In Workhouses.											
		Bethnal Green.	Brentford.	Edmonton.	George in the East, St.	Hackney.	Hendon.	Holborn.	Kensington.	London, West.	Poplar.	Staines.	Stepney.
1. Bastards	Boys	22	14	26	1	31	6	25	39	24	18	7	31
	Girls	16	8	14	1	18	12	28	33	14	8	13	39
2. Orphans	Boys	36	14	19	1	6	3	32	49	26	23	2	56
	Girls	15	12	29	4	7	2	24	37	19	18	3	99
3. Children deserted by father	Boys	..	4	16	1	6	12	14	11	4	3	1	19
	Girls	2	5	5	1	10	10	8	8	..	8	1	21
4. Children deserted by mother, and whose fathers are resident out of the Union Workhouse, but have not deserted them	Boys	..	..	..	..	..	..	..	23	..	..	..	..
	Girls	..	..	..	..	..	..	..	4	..	..	..	..
5. Children deserted by father and mother	Boys	1	1	2	..	7	2	3	5	..	7	..	7
	Girls	2	4	1	1	3	..	3	7	1	8	..	..
6. Children of men undergoing punishment for crime	Boys	3	1	7	1	5	3	1	1	1	1	..	2
	Girls	1	1	9	..	1	..	..	..	..	1	..	2
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity	Boys	14	1	8	2	5	..	5	11	2	6	..	17
	Girls	21	1	6	3	5	1	4	10	2	8	..	19
8. Children of able-bodied widows resident in Union Workhouses	Boys	2	2	..	1	2	4	5	6	6	4	6	8
	Girls	1	7	1	1	6	6	6	3	6	4	5	11
9. Children of able-bodied widows resident out of Union Workhouse, if any		1	8	3	1	11	1	3	15	18	1	4	25
	Girls	1	4	4	1	5	..	1	10	14	1	1	17
10. Children of able-bodied widowers resident in Union Workhouse	Boys	..	2	..	..	..	1	..	1	..	..	..	1
	Girls	..	2	..	..	..	..	1	2	1	1	..	..
11. Children of able-bodied widowers resident out of Union Workhouse, if any	Boys	..	5	1	..	..	..	..	17	1	..	3	1
	Girls	..	2	..	..	..	..	..	11	..	..	3	..
12. Children of able-bodied parents who are resident in the Union Workhouse with their children	Boys	1	..	..	..	..	..	7	13	2	..		..
	Girls	1	..	..	1	..	..	2	12	1	..	1	3
13. Children belonging to large families of able-bodied fathers, admitted into the Workhouse as relief to parents	Boys	1	..	5	1	2	..	2	3	2	..	..	1
	Girls	..	..	4	2	2	..	4	..	6	..	..	1
		141	98	160	24	132	63	178	331	150	120	51	390

TABLE I—

Showing the Number of various Classes of Children receiving In-door Relief from of July,

		IN											
		Strand.	Uxbridge.	Whitechapel.	Bermondsey.	Camberwell.	Chertsey.	Croydon.	Dorking	Epsom.	Godstone.	Guildford.	Hambledon.
1. Bastards	Boys	4	5	22	19	4	9	7	7	7	4	7	4
	Girls	4	2	15	16	1	8	8	4	10	5	5	2
2. Orphans	Boys	5	12	128	59	1	3	4	7	5	1	10	9
	Girls	1	9	88	30	..	6	1	2	4	2	13	4
3. Children deserted by father	Boys	2	1	3	6	7	2	3	2	2	4	9	..
	Girls	3	..	12	7	2	1	4	3	..	2	8	2
4. Children deserted by mother, and whose fathers are resident out of the Union Workhouse, but have not deserted them	Boys	..	2	..	..	..	..	..	..	1	..	..	3
	Girls	..	1	4	..	..	..	..	..	..	..	3	..
5. Children deserted by father and mother	Boys	..	6	2	..	1	..	3	..	1	1	1	..
	Girls	..	5	5	2	..	..	3	..	2	1	2	1
6. Children of men undergoing punishment for crime	Boys	..	..	..	..	..	6	..	1	1	3	..	..
	Girls	..	..	..	..	..	4	..	..	1	1	..	..
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity	Boys	..	..	2	14	..	..	2	..	..	..	..	5
	Girls	..	..	3	7	..	..	..	..	..	2	..	1
8. Children of able-bodied widows resident in Union Workhouse	Boys	1	..	2	3	3	1	5	2	2	2	8	..
	Girls	..	1	1	3	1	1	1	1	1	1	2	..
9. Children of able-bodied widows resident out of Union Workhouse, if any	Boys	4	1	..	..	..	5	..	..	..	..	..	2
	Girls	3	1	5	3	..	1	2	..	..	..	..	2
10. Children of able-bodied widowers resident in Union Workhouse	Boys	1	..	..	..	..	..	1	..	..	..	..	3
	Girls	..	..	1	2	..	..	..	..	..	..	..	1
11. Children of able-bodied widowers resident out of Union Workhouse, if any	Boys	1	1	1	2	..	..	..	1	..	2	..	..
	Girls	..	..	1	4	..	..	..	..	..	1	..	..
12. Children of able-bodied parents who are resident in the Union Workhouse with their children	Boys	1	..	..	5	1	2	3	..	..	6	..	..
	Girls	..	..	..	2	..	1	3	..	..	4	..	..
13. Children belonging to large families of able-bodied fathers, admitted into the Workhouse as relief to parents	Boys	..	..	..	7	..	3	2	..	7	2	2	..
	Girls	..	..	..	1	..	..	..	2	3	2	..	..
		30	47	295	192	21	53	52	32	47	46	70	39

continued.

certain of the Unions and Parishes in Middlesex, Kent, and Surrey, in the Month 1838.

Workhouses.									With Contractors.									
Kingston.	Newington, St Mary.	Olave, St, Southwark.	Reigate.	Richmond.	Rotherhithe, St. Mary.	Wandsworth and Clapham.	Greenwich.	Lewisham.	Bethnal Green.	George in the East, St.	Holborn.	London, East.	Martin in the Fields, St.	Strand.	Whitechapel.	Newington, St. Mary.	Olave, St., Southwark.	Saviour, St., Southwark.
13	9	9	3	6	8	21	31	11	7	15	3	30	15	23	..	15	4	22
17	10	5	5	5	6	15	9	14	7	10	..	40	10	18	..	11	6	23
8	11	8	1	5	15	18	45	15	12	53	4	42	22	34	2	31	9	35
13	17	8	4	..	14	18	36	13	7	43	6	34	17	36	1	23	4	23
3	1	..	4	..	5	34	20	7	2	3	1	9	5	7	1	6	..	3
1	1	2	..	3	3	24	22	4	2	4	8	12	2	4	..	4	..	9
1	..	..	4	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
1	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..
..	4	..	2	..	1	1	5	1	1	17	2	3	..	..	..	3	1	6
..	1	..	..	4	..	2	4	..	2	5	1	5	..	..	1	10	1	4
1	..	..	3	..	1	1	4	..	2	..	..	1	2	1	..	..	..	1
4	..	..	4	..	..	..	4	..	..	..	..	2	..	1	..	..	..	1
1	2	2	3	9	..	..	8	..	2	5	..	29	..	..	..	2	..	..
..	1	2	6	7	..	..	10	..	1	..	..	14	1	..	..	2	..	2
..	1	1	1	6	..	2	9	..	..	6	1	4	3	4	..	1	..	18
..	5	3	3	5	..	4	5	..	..	5	..	1	2	10	..	2	..	11
2	8	..	4	2	4	16	18	..	..	46	..	14	9	16	..	3	..	..
5	1	4	5	1	3	16	25	..	..	37	6	10	5	16	..	5	..	1
..	..	..	2	..	..	..	2	..	..	2	..	2	1	4	..	3	..	..
..	..	..	1	..	..	..	..	..	..	2	..	..	..	2	..	1	..	..
2	3	4	5	1	..	..	2	..	..	5	..	6	2	2	..	..	..	..
..	2	1	2	..	..	..	6	..	..	5	..	7	1	6	..	1	..	..
..	..	..	..	..	..	8	5	..	..	3	..	6	3	..	..	..	..	2
..	..	..	..	..	..	5	3	..	..	7	..	..	2	..	..	..	..	1
..	..	..	1	..	..	..	..	2	..	4	..	1	..	3	..	..	..	6
..	..	..	3	..	..	..	..	2	..	5	..	1	..	4	..	..	..	6
72	77	49	67	54	60	185	273	69	45	282	32	275	103	192	5	123	25	174

TABLE 2, for 1839.

IN

		Bethnal Green.	Brentford.	Edmonton.	George in the East, St.	Hackney.	Hendon.	Holborn.	Kensington.	London, City of.	London, East.	London, West.	Martin in the Fields, St.	Poplar.	Staines.
1. Bastards	Boys	14	13	28	3	30	9	35	23	..		11	3	12	5
	Girls	24	9	20	2	20	7	26	41	..	..	10	5	9	10
2. Orphans	Boys	16	16	24	5	10	3	45	46	..	..	22	3	21	5
	Girls	13	21	22	8	6	3	18	40	..	..	10	6	20	2
3. Children deserted by father	Boys	1	..	15	1	11	10	20	13	..	..	4	..	1	..
	Girls	3	1	10	1	8	5	7	10	..	..	2	3	3	..
4. Children deserted by mother, and whose fathers are resident out of Workhouse, but have not deserted them	Boys	..	..	1	..	..	..	..	3	..	..	..	..	..	..
	Girls	..	1	2	1	..	..	..	2	..	..	..	..	..	..
5. Children deserted by father and mother	Boys	1	6	2	..	6	3	..	8	..	..	4	..	4	..
	Girls	2	4	4	1	5	6	1	5	..	..	4	..	3	..
6. Children of men undergoing punishment for crime	Boys	3	..	7	1	..	3	..	7	..	..	..	..	1	..
	Girls	..	..	5	..	..	1	..	..	..	..	..	1	1	2
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity	Boys	5	1	..	1	7	..	..	8	..	..	7	..	..	..
	Girls	11	..	5	2	5	..	..	12	..	..	4	..	6	..
8. Children of able-bodied widows resident in Union Workhouse	Boys	2	3	2	..	8	1	19	6	..	..	3	..	5	4
	Girls	1	8	..	4	7	6	13	4	..	..	1	1	2	2
9. Children of able-bodied widows resident out of Union Workhouse, if any	Boys	1	4	..	1	4	1	..	35	..	..	3	..	5	4
	Girls	..	1	..	..	5	..	..	14	..	..	..	1	9	4
10. Children of able-bodied Widowers resident in Union Workhouse	Boys	1	..	..	3	..	..	3	2	..	..	..	..	..	..
	Girls	1	1	..	..	..	4	2	1	..	..	1	..	..	..
11. Children of able-bodied widowers resident out of Union Workhouse, if any	Boys	1	4	..	..	..	..	..	13	..	..	..	..	3	1
	Girls	2	6	..	..	..	..	..	6	..	..	..	..	5	2
12. Children of able-bodied parents resident in Union Workhouse with their children	Boys	..	6	2	..	..	..	1	3	..	..	1	2	..	4
	Girls	..	1	3	..	..	..	2	..	..	..	2	..	..	5
13. Children belonging to large families of able bodied fathers admitted into Workhouse as relief to parents	Boys	..	1	10	..	..	..	I	8	..	..	1	1	..	..
	Girls	..	..	7	..	..	..	..	8	..	..	..	..	1	..
14. Children not included in above classes	Boys	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Girls	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		102	107	169	34	132	62	193	318	..	..	90	26	111	58

TABLE 2, for 1839.

WORKHOUSES.

Stepney.	Strand.	Uxbridge.	Whitechapel.	Bermondsey.	Camberwell.	Chertsey.	Croydon.	Dorking.	Epsom.	George the Martyr, St.	Godstone.	Guildford.	Hambledon.	Kingston.	Lambeth.	Reigate.	Richmond.	Rotherhithe.	St. Olave.	St. Saviour.	Wandsworth and Clapham.	Greenwich.	Lewisham.
40	3	2	37	36	3	14	7	8	8	..	2	9	7	15	67	1	6	4	..	..	15	38	10
43	1	5	16	33	5	8	9	4	10	..	1	9	5	10	39	6	3	4	..	7	12	19	13
85	1	15	59	23	1	12	8	3	12	..	1	19	7	9	76	2	3	14	..	3	16	40	15
85	2	15	67	18	1	4	2	1	10	..	2	12	8	12	55	4	..	13	..	..	10	25	7
12	..	2	23	8	1	1	1	2	..	..	..	8	4	6	24	1	..	3	..	4	16	15	11
16	..	1	13		3	1	2	4	..	..	..	5	5	4	41	1	4	10	..	8	21	21	10
1	..	..	..	..	1	1	1	..	..	..	..	..	..	1	2	..	..	..	..	..	..	1	..
2	..	1	..	..	..	3	..	..	..	..	..	3	..	1	..	2	..	..	..	..	..	..	..
10	..	2	12	15	1	2	7	..	..	..	2	5	..	2	7	1	2	..	..	2	6	4	..
9	..	1	6	9	2	2	2	..	..	..	..	7	..	2	..	..	2	..	..	2	2	7	..
4	..	2	1	4	1	..	..	1	1	..	..	3	..	3	2	3	..	..	..	..	1	5	..
2	..	3	3	1	..	..	..	..	1	..	..	4	..	3	1	2	..	..	..	..	1	1	..
21	..	2	9	10	1	1	..	..	..	..	..	1	1	2	4	1	5	..	..	..	..	19	..
10	..	2	7	3	1	1	..	..	2	..	..	2	1	..	4	7	5	..	..	..	..	17	..
7	2	13	6	2	..	..	4	1	1	..	..	4	3	..	9	1	9	4	..	..	2	..	6
6	1	5	4	6	1	..	1	..	1	..	..	2	..	2	10	1	8	4	..	5	7	..	3
9	..	7	19	23	..	..	1	..	..	..	..	..	..	1	39	12	..	1	..	3	14	10	1
9	..	5	6	11	..	..	..	..	..	..	..	..	..	3	30	9	..	4	..	2	6	24	1
..	..	..	3	5	1	..	..	..	..	..	..	2	..	1	6	1	..	..	..	..	1	1	1
..	..	..	..	2	1	..	..	3	..	..	..	3	..	2	9	1	..	..	..	..	1	2	..
..	..	..	4	6	2	2	1	..	..	..	..	..	..	3	13	3	..	..	..	..	..	3	..
1	..	..	1	5	..	..	..	..	..	..	..	..	..	1	6	..	..	..	..	..	11	3	1
1	1	..	..	5	..	1	2	2	1	..	4	..	14	..	2	3	5	..	..	2	1	6	2
3	1	..	..	2	..	3	..	2	3	..	3	..	10	..	2	..	..	..	..	..	4	1	3
1	..	..	..	13	..	..	2	..	..	..	..	..	..	1	3	..	1	..	..	..	..	..	..
..	..	..	..	5	..	..	2	2	..	..	..	..	..	..	10	2	3	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..
377	12	83	296	249	26	56	59	33	50	..	15	98	63	84	475	64	56	61	..	38	147	262	84

TABLE 2, for 1839—*continued.*

With Contractors.		Bethnal Green.	George in the East, St.	Holborn.	London, City of.	London, East.	London, West.	Martin in the Fields, St.	Strand.	Whitechapel.	Camberwell.	St. Olave.	St. Saviour.
1. Bastards	Boys	19	12	1	..	32	6	16	19	..	11	..	17
	Girls	4	12	..	..	30	2	7	18	1	4	..	14
2. Orphans	Boys	14	74	6	..	37	4	13	50	1	14	..	40
	Girls	9	62	8	..	20	8	8	55	1	8	..	18
3. Children deserted by father	Boys	5	9	1	..	8	1	3	8	1	..	..	1
	Girls	6	5	1	..	10	..	4	8	1	..	..	..
4. Children deserted by mother, and whose fathers are resident out of Workhouse, but have not deserted them . . .	Boys	..	5	..	..	..	..	..	..	..	..	..	..
	Girls	..	6	..	..	..	..	1	..	..	..	..	..
5. Children deserted by father and mother .	Boys	..	16	3	..	2	..	..	..	..	1	..	4
	Girls	..	8	3	..	3	..	..	1	..	..	..	2
6. Children of men undergoing punishment for crime	Boys	1	1	..	..	2	..	2	3	..	..	..	1
	Girls	..	..	..	..	3	..	..	2	..	..	..	1
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity . .	Boys	..	8	..	..	16	..	..	..	..	1	..	10
	Girls	..	2	..	..	16	..	2	..	..	..	..	6
8. Children of able-bodied widows resident in Union Workhouse . . .	Boys	2	2	..	..	2	..	2	3	..	..	..	20
	Girls	1	2	..	..	..	..	..	..	..	..	..	13
9. Children of able-bodied widows resident out of Union Workhouse, if any	Boys	2	23	..	..	12	2	8	3	..	1	..	1
	Girls	3	13	..	..	14	1	3	21	..	2	..	2
10. Children of able-bodied widowers resident in Union Workhouse . .	Boys	1	..	..	..	1	..	..	16	..	2	..	1
	Girls	1	..	..	..	..	..	..	4	..	1	..	..
11. Children of able-bodied widowers resident out of Union Workhouse, if any	Boys	..	3	..	..	7	..	1	..	..	1	..	..
	Girls	..	6	..	..	4	..	1	2	..	1	..	..
12. Children of able-bodied parents resident in Union Workhouse with their children . . .	Boys	..	2	..	..	8	..	5	..	..	..	..	2
	Girls	..	3	1	..	1	..	1	..	..	..	..	..
13. Children belonging to large families of able-bodied fathers admitted into workhouse as relief to parents	Boys	3	..	..	..	2	..	..	..	..	..	..	..
	Girls	2	..	..	..	4	..	..	1	..	..	..	..
14. Children not included in above classes . . .	Boys	..	..	..	..	..	..	..	..	..	1	..	..
	Girls	..	..	..	..	..	..	..	..	..	..	..	..
		73	274	24	..	229	24	77	214	5	48	..	153

VI.

DR. KAY AND MR. TUFNELL ON THE TRAINING SCHOOL AT BATTERSEA.

GENTLEMEN, *January* 1, 1841.

THE efforts made by your Assistant Commissioners for the improvement of the training of pauper children in the rural and metropolitan districts, made apparent at a very early period the great difficulty of procuring the assistance of schoolmasters and schoolmistresses acquainted with the principles on which the education of this class of children ought to be conducted.

Very little inquiry confirmed what was previously suspected, that the number of English schoolmasters acquainted with the organization and discipline of elementary schools, and skilful in the application of approved methods of instruction, is exceedingly small, and by no means on the increase. Successive applications were made to those sources from which teachers are usually obtained in England, but these applications were almost invariably unsuccessful, for a variety of reasons.

The teachers trained in the model schools of the metropolitan and other societies enter those schools with the expectation of taking charge of rural or town day schools. They are not instructed in the management of schools of industry. They are not trained in that regulation of the habits of children at meals, in their dormitories, and during hours of recreation, which is essential to the success of a school of industry for pauper children. Moreover, the period during which they receive instruction and are trained in the art of teaching in these model schools is unfortunately very short. Such schools possess slender funds applicable to the maintenance of the candidate teachers. The candidates, therefore, are maintained by their own meagre resources, or are dependent on their friends, in the hope of being able, at the expiration of a short period, to take charge of a school; or they are maintained by the patrons or committee of some school, the mastership of which they are to assume, and which is probably in course of erection. Their attendance on the model school seldom exceeds six months, and often does not extend beyond three. But little reflection is necessary to prove that in six months they cannot acquire all the knowledge which is

desirable either of the principles, the matter, or the art of elementary instruction.

These model schools will ere long be reorganized, with more abundant resources for the training of the candidate teachers, and doubtless the teachers then trained in them will go forth much better prepared for the discharge of their duties than at present.

The introduction of works of industry, however, forms no part of the plan of the improved arrangements hitherto announced, and they afford no means of preparing teachers to learn that system of moral management which is essential to the success of schools for pauper children.

The training of pauper children in a workhouse or district school cannot be successful unless the teacher be moved by Christian charity to the work of rearing in religion and industry the outcast and orphan children of our rural and city population. The difficulty of redeeming by education the mischief wrought in generations of a vicious parentage, can be estimated only by those who know how degenerate these children are.

The pauper children assembled at Norwood, from the garrets, cellars, and wretched rooms of alleys and courts in the dense parts of London, are often sent thither in a low stage of destitution, covered only with rags and vermin; often the victims of chronic disease; almost universally stunted in their growth; and sometimes emaciated with want. The low-browed and inexpressive physiognomy or malign aspect of the boys is a true index to the mental darkness, the stubborn tempers, the hopeless spirits, and the vicious habits on which the master has to work. He needs no small support from Christian faith and charity for the successful prosecution of such a labour; and no quality can compensate for the want of that spirit of self-sacrifice and tender concern for the well-being of these children, without which their instruction would be anything but a labour of love. A baker, or a shoemaker, or a shop apprentice, or commercial clerk, cannot be expected to be imbued with this spirit, during a residence of six months in the neighbourhood of a mod l school, if he has not imbibed it previously at its source.

The men who undertake this work should not set about it in the spirit of hirelings, taking the speediest means to procure a maintenance with the least amount of trouble. A commercial country will always offer irresistible temptations to desert such a profession, to those to whom the annual stipend is the chief if not sole motive to exertion. The outcast must remain neglected, if there be no principle, which, even in the midst of a commercial people, will enable men to devote themselves to this vocation from higher motives than the mere love of money.

Experience of the motives by which the class of schoolmasters now plying their trade in this country are commonly actuated, is

a graver source of want of confidence in their ability to engage in this labour, than the absence of skill in their profession. A great number of them undertake these duties either because they are incapacitated by age or infirmity for any other, or because they have failed in all other attempts to procure a livelihood, or because, in the absence of well-qualified competitors, the least amount of exertion and talent enables the most indolent schoolmasters to present average claims on public confidence and support. Rare indeed are the examples in which skill and principle are combined in the agents employed in this most important sphere of national self-government. Other men will not enable you to restore the children of vagabonds and criminals to society, purged of the taint of their parents' vices, and prepared to perform their duties as useful citizens in a humble sphere.

The peculiarities of the character and condition of the pauper children demand the use of appropriate means for their improvement. The general principles on which the education of children of all classes should be conducted are doubtless fundamentally the same; but for each class specific modifications are requisite, not only in the methods, but in the matter of instruction.

The discipline, management, and methods of instruction in elementary schools for the poor, differ widely from those which ought to characterize schools for the middle or upper classes of society. The instruction of the blind, of the deaf and dumb, of criminals, of paupers, and of children in towns and in rural districts, renders necessary the use of a variety of distinct methods in order to attain the desired end.

The peculiarity of the pauper child's condition is, that his parents, either from misfortune, or indolence, or vice, have sunk into destitution. In many instances children descend from generations of paupers. They have been born in the worst purlieus of a great city, or in the most wretched hovels on the parish waste. They have suffered privation of every kind. Perhaps they have wandered about the country in beggary, or have been taught the arts of petty thieving in the towns. They have lived with brutal and cruel men and women, and have suffered from their caprice and mismanagement. They have seen much of vice and wretchedness, and have known neither comfort, kindness, nor virtue.

If they are sent very young to the workhouse, their entire training in religious knowledge, and in all the habits of life, devolves on the schoolmaster. If they come under his care at a later period, his task is difficult in proportion to the vicious propensities he has to encounter.

The children to whose improvement Pestalozzi devoted his life were of a similar class,—equally ignorant, and perhaps equally demoralized, in consequence of the internal discords attendant on

the revolutionary wars, which at the period when his labours commenced had left Switzerland in ruin.

The class of children which De Fellenberg placed under the charge of Vehrli at Hofwyl were in like manner picked up on the roads of the canton—they were the outcasts of Berne.

These circumstances are among the motives which led us to a careful examination of the schools of industry and normal schools of the cantons of Switzerland. These schools are more or less under the influence of the lessons which Pestalozzi and De Fellenberg have taught that country. They differ in some important particulars from those which exist in England, and the experience of Switzerland in this peculiar department of elementary instruction appears pre-eminently worthy of attention.

Those orphan and normal schools of Switzerland which have paid the deference due to the lessons of Pestalozzi and De Fellenberg are remarkable for the gentleness and simplicity of the intercourse between the scholar and his master. The formation of character is always kept in mind as the great aim of education. The intelligence is enlightened, in order that it may inform the conscience, and that the conscience, looking forth through this intelligence, may behold a wider sphere of duty, and have at its command a greater capacity for action. The capacity for action is determined by the cultivation of habits appropriate to the duties of the station which the child must occupy.

Among the labouring class no habit is more essential to virtuous conduct than that of steady and persevering labour. Manual skill connects the intelligence with the brute force with which we are endued. The instruction in elementary schools should be so conducted as not only to assist the labourer in acquiring mechanical dexterity, but in bringing his intelligence to aid the labours of his hands, whether by a knowledge of the principles of form or numbers, or of the properties of natural objects, and the nature of the phenomena by which his labours are likely to be affected. In a commercial country it is pre-eminently important to give him such an acquaintance with geography as may stimulate enterprise at home, or may tend to swell the stream of colonization which is daily extending the dominion of British commerce and civilization. Labour which brings the sweat upon the brows requires relaxation, and the child should therefore learn to repose from toil among innocent enjoyments, and to avoid those vicious indulgences which waste the labourer's strength, rob his house of comfort, and must sooner or later be the source of sorrow. There is a dignity in the lot of man in every sphere, if it be not cast away. The honour and the joy of successful toil should fill the labourer's songs in his hour of repose. From religion man learns that all the artificial distinctions of society are as nothing before that God who searcheth the heart. Religion

therefore raises the labourer to the highest dignity of human existence, the knowledge of the will and the enjoyment of the favour of God. Instructed by religion, the labourer knows how in daily toil he fulfils the duties and satisfies the moral and natural necessities of his existence, while the outward garb of mortality is gradually wearing off, and the spirit preparing for emancipation.

An education guided by the principles described in this brief sketch, appears to us appropriate to the preparation of the outcast and orphan children for the great work of a Christian's life.

After a trial of various expedients, to which allusion has been made in preceding reports, it became apparent that the means of embracing within one comprehensive plan the training of the 50,000 pauper children now in the workhouses did not exist in this country; and the importance of not abandoning these children to the consequences of the misfortunes and vices of their parents, grew in proportion to the difficulties with which the subject was encumbered.

That which seemed most important was the preparation of a class of teachers, who would cheerfully devote themselves, and with anxious and tender solicitude, to rear these children, abandoned by all natural sympathies, as a wise and affectionate parent would prepare them for the duties of life.

To so grave a task as an attempt to devise the means of training these teachers, it was necessary to bring a patient and humble spirit, in order that the results of experience in this department might be examined, and that none that were useful might be hastily thrown aside. Our examination of the continental schools was undertaken with this view. A visit was made to Holland at two successive periods, on the last of which we took one of Dr. Kay's most experienced schoolmasters with us, in order that he might improve himself by an examination of the methods of instruction in the Dutch schools, all the most remarkable of which were minutely inspected. A visit has been paid to Prussia and Saxony, in which several of the chief schools have been examined with a similar design. Two visits were paid to Paris, in which the normal school at Versailles, the Maison Mère, and Noviciate of the Brothers of the Order of the Christian Doctrine, and a great number of the elementary schools of Paris and the vicinity, were examined. The normal school at Dijon was especially recommended to our attention by M. Cousin and M. Villemain, and we spent a day in that school. Our attention was directed with peculiar interest to the schools of Switzerland, in the examination of which we spent several weeks uninterruptedly. During this period we daily inspected one or more schools, and conversed with the authorities of the several cantons, with the directors of the normal schools, and with individuals distinguished by their knowledge of the science of elementary instruction. The occasional

leave of absence from our home duties which you have kindly granted us in the last three years respectively, was mainly solicited with the view, and devoted to the purpose, of examining the method of instruction adopted in the schools for the poorer classes on the continent.

This report is not intended to convey to you the results of our inquiries. It may suffice to describe the chief places visited, and the objects to which our attention was directed, in order that you may know the sources whence we have derived the information by which our subsequent labours have been guided. We entered Switzerland by the Jura, descending at Geneva, and, having obtained the sanction of the authorities, were accompanied by some members of the council in our visit to the schools of the town and neighbourhood. Thence we proceeded to the canton de Vaud, inspecting certain rural schools, and the schools of the towns on the borders of the lake, on our way to Lausanne. Here we spent two days, in company with M. Gauthey, the director of the normal school of the canton, whose valuable report has been translated by Sir John Boileau, our fellow-traveller in this part of our journey.

At Lausanne we attended the lectures, and examined the classes in the normal school and the town schools, and enjoyed much useful and instructive conversation with M. Gauthey, who appeared eminently well qualified for his important labours.

At Fribourg we spent some time in the convent of the Capuchin friars, where we found the venerable Père Girard officiating at a religious festival, but he belongs to the Dominican order. The Père Girard has a European reputation among those who have laboured to raise the elementary instruction of the poorer classes, consequent on his pious labours among the poor of Fribourg; and the success of his schools appeared to us chiefly attributable,—first, to the skill and assiduity with which the monitors had been instructed in the evening by the father and his assistants, by which they had been raised to the level of the pupil teachers of Holland; and secondly, to the skilful manner in which Père Girard and his assistants had infused a moral lesson into every incident of the instruction, and had bent the whole force of their minds to the formation of the characters of the children. It was, at the period of our visit, the intention of Père Girard to publish a series of works of elementary instruction at Paris, for which we have since waited in vain.

At Berne, we spent much time in conversation with M. De Fellenberg, at Hofwyl. We visited his great establishment for education there, as well as the normal school at Munchen Buchsee, in which visit we were accompanied by M. De Fellenberg. What we learned from the conversation of this patriotic and high-minded man we cannot find space here to say. His words are better

read in the establishments which he has founded, and which he superintends, and in the influence which his example and his precepts have had on the rest of Switzerland, and on other parts of Europe. The town schools of Berne and other parts of the canton merited, and received, our attention.

At Lucerne we carefully examined the normal and orphan schools. Thence we proceeded through Schweitz, with the intention of visiting the colony of the Linth, in Glarus, but failed, from the state of the mountain roads. Crossing the lake of Zurich at Rapperschwyl, we successively visited St. Gall and Appenzell, examining some of the most interesting orphan schools in the mountains, particularly one kept by a pupil of De Fellenberg at Teuffen, the normal school at Gais (Kruisi, the director of which is a pupil of Pestalozzi), and the orphan school of M. Zeltveger at Appenzell.

Descending from the mountains, we crossed the lake to Constance, where we found Vehrli, who had many years conducted the poor-school of De Fellenberg at Hofwyl, now in charge of the normal school of the canton of Thurgovia, in a large mansion once connected with the convent of Kruitzlingen. Here we spent two days in constant communication with Vehrli and his pupils, in the examination of his classes; and deriving from him much information respecting his labours. From Constance we travelled to Zurich, where we carefully examined the normal and model schools, both at that time considerably shaken by the recent revolution

At Lenzburg we had much useful conversation with the director of the normal school of the canton of Aargovia; thence we travelled to Basle, where we visited the orphan house of the town, and also that at Beuggen, as well as other schools of repute.

We have ventured to give this sketch of our journey in Switzerland, as some apology for the strength of the opinion we have formed on the necessity which exists for the establishment of a training school for the teachers of pauper children in this country. Our inquiries were not confined to this object; but both here, at Paris, in Holland, and in Germany, we bought every book which we thought might be useful in our future labours: and in every canton we were careful to collect all the laws relating to education, the regulations of the normal and elementary schools, and the by-laws by which these institutions were governed. An abstract of these laws would form a most useful contribution to the literature of this country, which is well prepared to regard with respect the institutions of the free Protestant states of Switzerland.

In the orphan schools which have emanated from Pestalozzi and De Fellenberg, we found the type which has assisted us in

our subsequent labours. In walking with M. De Fellenberg through Hofwyl, we listened to the precepts which we think most applicable to the education of the pauper class. In the normal school of the canton of Thurgovia, and in the orphan schools of St. Gall and Appenzell, we found the development of those principles so far successful as to assure us of their practical utility.

The normal school at Kruitzlingen is in the summer palace of the former abbot of the convent of that name, on the shore of the Lake of Constance, about one mile from the gate of the city. The pupils are sent thither from the several communes of the canton, to be trained three years by Vehrli, before they take charge of the communal schools. Their expenses are borne in part by the commune, and partly by the council of the canton. We found 90 young men, apparently from 18 to 24 or 26 years of age, in the school. Vehrli welcomed us with frankness and simplicity, which at once won our confidence. We joined him at his frugal meal. He pointed to the viands, which were coarse, and said,—" I am a peasant's son. I wish to be no other than I am, the teacher of the sons of the peasantry. You are welcome to my meal: it is coarse and homely, but it is offered cordially."

We sat down with him. " These potatoes," he said, " are our own We won them from the earth, and therefore we need no dainties, for our appetite is gained by labour, and the fruit of our toil is always savoury." This introduced the subject of industry. He told us all the pupils of the normal school laboured daily some hours in a garden of several acres attached to the house, and that they performed all the domestic duty of the household. When we walked out with Vehrli, we found them in the garden digging, and carrying on other garden operations, with great assiduity. Others were sawing wood into logs, and chopping it into billets in the court-yard. Some brought in sacks of potatoes on their backs, or baskets of recently gathered vegetables. Others laboured in the domestic duties of the household.

After a while the bell rang, and immediately their out-door labours terminated, and they returned in an orderly manner, with all their implements, to the court-yard, where having deposited them, thrown off their frocks, and washed, they reassembled in their respective class-rooms.

We soon followed them. Here we listened to lessons in mathematics, proving that they were well grounded in the elementary parts of that science. We saw them drawing from models with considerable skill and precision, and heard them instructed in the laws of perspective. We listened to a lecture on the code of the canton, and to instruction in the geography of Europe. We were informed that their instruction extended to the language of the canton, its construction and grammar, and especially to the

history of Switzerland; arithmetic; mensuration; such a knowledge of natural philosophy and mechanics as might enable them to explain the chief phenomena of nature and the mechanical forces; some acquaintance with astronomy. They had continual lessons in pedagogy, or the theory of the art of teaching, which they practised in the neighbouring village school. We were assured that their instruction in the Holy Scriptures, and other religious knowledge, was a constant subject of solicitude.*

The following extract from Vehrli's address at the first examination of the pupils, in 1837, will best explain the spirit that governs the seminary, and the attention paid there to what we believe has been too often neglected in this country—the education of the heart and feelings, as distinct from the cultivation of the intellect. It may appear strange to English habits to assign so prominent a place in an educational institution to the following points, but the indication here given of the superior care bestowed in the formation of the character, to what is given to the acquisition of knowledge, forms in our view the chief charm and merit in this and several other Swiss seminaries, and is what we have laboured to impress on the institution we have founded. To those who can enter into its spirit, the following extract will not appear tinctured with too sanguine views:—

"The course of life in this seminary is threefold.

"1st.—Life in the home circle, or family life.

"2nd.—Life in the school-room.

"3rd.—Life beyond the walls in the cultivation of the soil.

"I place the family life first, for here the truest education is imparted; here the future teacher can best receive that cultivation of the character and feelings which will fit him to direct those, who are entrusted to his care, in the ways of piety and truth.

"A well-arranged family circle is the place where each member, by participating in the other's joys and sorrows, pleasures and misfortunes, by teaching, advice, consolation, and example, is inspired with sentiments of single-mindedness, of charity, of mutual confidence, of noble thoughts, of high feelings, and of virtue.

"In such a circle can a true religious sense take the firmest and the deepest root. Here it is that the principles of Christian feeling can best be laid, where opportunity is continually given for the exercise of affection and charity, which are the first virtues that should distinguish a teacher's mind. Here it is that kindness and earnestness can most surely form the young members to be good and intelligent men, and that each is most willing to learn and receive an impress from his fellow. He who is brought up in such a circle, who thus recognises all his fellow-men as brothers, serves them with willingness whenever he can, treats all his race as one family, loves them, and God their father above all, how richly does such a one scatter blessings around! What earnestness does he show in all his doings and conduct, what devotion especially does he display in the business of a teacher! How differently from him does that master enter and leave his school, whose feelings are dead to a sense of piety, and whose heart never beats in unison with the joys of family life.

* See table of the course of instruction in Appendix.

"Where is such a teacher as I have described most pleasantly occupied? In his school amongst his children, with them in the house of God or in the family circle, and wherever he can be giving or receiving instruction. A great man has expressed, perhaps too strongly, 'I never wish to see a teacher who cannot sing.' With more reason I would maintain, that a teacher to whom a sense of the pleasures of a well-arranged family is wanting, and who fails to recognise in it a well-grounded religious influence, should never enter a school-room."

As we returned from the garden with the pupils on the evening of the first day, we stood for a few minutes with Vehrli in the court-yard by the shore of the lake. The pupils had ascended into the class-rooms, and the evening being tranquil and warm, the windows were thrown up, and we shortly afterwards heard them sing in excellent harmony. As soon as this song had ceased we sent a message to request another, with which we had become familiar in our visits to the Swiss schools; and thus, in succession, we called for song after song of Nageli, imagining that we were only directing them at their usual hour of instruction in vocal music. There was a great charm in this simple but excellent harmony. When we had listened nearly an hour, Vehrli invited us to ascend into the room where the pupils were assembled. We followed him, and on entering the apartment great was our surprise to discover the whole school, during the period we had listened, had been cheering with songs their evening employment of peeling potatoes, and cutting the stalks from the green vegetables and beans which they had gathered in the garden. As we stood there they renewed their choruses till prayers were announced. Supper had been previously taken. After prayers, Vehrli, walking about the apartment, conversed with them familiarly on the occurrences of the day, mingling with his conversation such friendly admonition as sprang from the incidents, and then lifting his hands he recommended them to the protection of heaven, and dismissed them to rest.

We spent two days with great interest in this establishment. Vehrli had ever on his lips:—"We are peasants' sons. We would not be ignorant of our duties, but God forbid that knowledge should make us despise the simplicity of our lives. The earth is our mother, and we gather our food from her breast, but while we peasants labour for our daily food, we may learn many lessons from our mother earth. There is no knowledge in books like an immediate converse with nature, and those that dig the soil have nearest communion with her. Believe me, or believe me not, this is the thought that can make a peasant's life sweet, and his toil a luxury. I know it, for see my hands are horny with toil. The lot of men is very equal, and wisdom consists in the discovery of the truth that what is *without* is not the source of sorrow, but that which is within. A peasant may be happier than a prince if his conscience be pure before God, and he learn

not only contentment, but joy, in the life of labour which is to prepare him for the life of heaven."

This was the theme always on Vehrli's lips. Expressed with more or less perspicuity, his main thought seemed to be that poverty, rightly understood, was no misfortune. He regarded it as a sphere of human exertion and human trial, preparatory to the change of existence, but offering its own sources of enjoyment as abundantly as any other. "We are all equal," he said, "before God; why should the son of a peasant envy a prince, or the lily an oak, are they not both God's creatures?"

We were greatly charmed in this school by the union of comparatively high intellectual attainments among the scholars, with the utmost simplicity of life, and cheerfulness in the humblest menial labour. Their food was of the coarsest character, consisting chiefly of vegetables, soups, and very brown bread. They rose between four and five, took three meals in the day, the last about six, and retired to rest at nine. They seemed happy in their lot.

Some of the other normal schools of Switzerland are remarkable for the same simplicity in their domestic arrangements, though the students exceed in their intellectual attainments all notions prevalent in England of what should be taught in such schools. Thus in the normal school of the Canton of Berne the pupils worked in the fields during eight hours of the day, and spent the rest in intellectual labour. They were clad in the coarsest dresses of the peasantry, wore wooden shoes, and were without stockings. Their intellectual attainments, however, would have enabled them to put to shame the masters of most of our best elementary schools.

Such men, we felt assured, would go forth cheerfully to their humble village homes to spread the doctrine which Vehrli taught of peace and contentment in virtuous exertion; and men similarly trained appeared to us best fitted for the labour of reclaiming the pauper youth of England to the virtues, and restoring them to the happiness of her best instructed peasantry.

We therefore cherished the hope that on this plan a normal school might be founded for the training of the teachers, to whom the schools for pauper children might be usefully committed. The period seemed to be unpropitious for any public proposals on this subject. We were anxious that a work of such importance should be undertaken by the authorities most competent to carry it into execution successfully, and we painfully felt how inadequate our own resources and experience were for the management of such an experiment; but after various inquiries, which were attended with few encouraging results, we thought that as a last resort we should not incur the charge of presumption, if, in private and unaided, we endeavoured to work out the first steps of the establishment of an institution for the training of teachers, which

we hoped might afterwards be entrusted to abler hands. We determined therefore to devote a certain portion of our own means to this object, believing that when the scheme of the institution was sufficiently mature to enable us to speak of results rather than of anticipations, the well-being of 50,000 pauper children would plead its own cause with the Government and the public, so as to secure the future prosperity of the establishment.

The task proposed was, to reconcile a simplicity of life not remote from the habits of the humbler classes, with such proficiency in intellectual attainments, such a knowledge of method, and such skill in the art of teaching, as would enable the pupils selected to become efficient masters of elementary schools. We hoped to inspire them with a large sympathy for their own class. To implant in their minds the thought that their chief honour would be to aid in rescuing that class from the misery of ignorance and its attendant vices. To wean them from the influence of that personal competition in a commercial society which leads to sordid aims. To place before them the unsatisfied want of the uneasy and distressed multitude, and to breathe into them the charity which seeks to heal its mental and moral diseases.

We were led to select premises at Battersea, chiefly on account of the very frank and cordial welcome with which the suggestion of our plans was received by the Hon. and Rev. Robert Eden, the vicar of Battersea. Mr. Eden offered the use of his village schools in aid of the training school, as the sphere in which the pupils might obtain a practical acquaintance with the art of instruction. He also undertook to superintend the training school in all that related to religion.

We, therefore, chose a spacious manor-house close to the Thames, surrounded by a garden of five acres. This house was altered and divided so as to afford a good separate residence to Dr. Kay,* who undertook to superintend the progress of the establishment for a limited period, within which it was hoped that the principles on which the training school was to be conducted would be so far developed as to be in course of prosperous execution, and not likely to perish by being confided to other hands.

In the month of January, 1840, the class-rooms were fitted up with desks on the plan described in the minutes of the Committee of Council, and we furnished the school-house. About the beginning of February some boys were removed from the School of Industry at Norwood, whose conduct had given us confidence in their characters, and who had made a certain proficiency in the elementary instruction of that school.

These boys were chiefly orphans, of little more than thirteen years of age, intended to form a class of apprentices. These apprentices would be bound from the age of fourteen to that of

* For which he pays half the rent and taxes, in addition to his share of the expenses of the school.

twenty-one, to pursue, under the guidance and direction of the Poor Law Commission, the vocation of assistant teachers in elementary schools. For this purpose they were to receive instruction at least three years in the training school, and to be employed as pupil teachers for two years at least in the Battersea village school during three hours of every day.

At the termination of this probationary period (if they were able satisfactorily to pass a certain examination) they were to receive a certificate, of which mention will be made hereafter, and to be employed as assistant teachers under the guidance of experienced and well-conducted masters, in some of the schools of industry for pauper children. They were at this period to be rewarded with a certain remuneration, increasing from year to year, and secured to them by the form of the indenture.

If they were unable to satisfy the examiners of their proficiency in every department of elementary instruction, and thus failed in obtaining their certificate, they would continue to receive instruction at Battersea until they had acquired the requisite accomplishments.

The number of pupil teachers of this class has been gradually increased, during the period which has since elapsed, to 24. But it seemed essential to the success of the school that the numbers should increase slowly. Its existence was disclosed only to the immediate circles of our acquaintance, by whom some boys were sent to the school, besides those whom we supported at our own expense. For the clothing, board and lodging, and education of each of these boys, who were confided to our care by certain of our friends, we consented to receive 20*l.* per annum towards the general expenses of the schools. Pupil teachers have been placed in the establishment by the Bishop of Durham, the Earl of Chichester, Lady Noel Byron, Frederick Walpole Keppel, Esq., the Board of Guardians of the Kingston Union, R. W. Blencowe, Esq., and our colleagues, Edward Senior and Edward Twisleton, and H. W. Parker, Esqrs.

Besides the class of pupil teachers, we consented to receive young men, to remain at least one year in the establishment, either recommended by our personal friends, or to be trained for the schools of gentlemen with whom we were acquainted. These young men have generally been from twenty to thirty years o age. We have admitted some on the recommendation of Lady George Murray, Lady Noel Byron, the Earl of Radnor, the Rev. Mr. Hoskins, of Canterbury, the Rev. Mr. Wilkinson, of Holbrook, in Suffolk, Leonard Horner, Esq.

The course of instruction, and the nature of the discipline adopted for the training of these young men, will be described in detail. This class now amounts to nine, a number accumulated only by very gradual accessions, as we were by no means desirous

to attract many students until our plans were more mature, and the instruments of our labour were tried and approved.

The subjects of instruction were divided, in the first instance, into two departments, which will be described in this Report; and over each of these departments a Tutor was placed. Mr. Horne arrived at the opening of the school, and Mr. Tate on the 22d of March, 1840.

The domestic arrangements were conducted with great simplicity, because it was desirable that the pupils should be prepared for a life of self-denial. A sphere of great usefulness might require the labours of a man ready to live among the peasantry on their own level—to mingle with them in their habitations—to partake their frugal or even coarse meals—and to seem their equal only, though their instructor and guide. It was desirable, therefore, that the diet should be as frugal as was consistent with constant activity of mind, and some hours of steady and vigorous labour, and that it should not pamper the appetite by its quality or its variety.

A schoolmaster might settle in a situation in which a school-house only was provided. Prudence might dictate that he should not marry, and then his domestic comfort would depend on himself.

No servants, therefore, were provided, with the exception of a matron, who acted as cook. The whole household-work was committed to the charge of the boys and young men; and for this purpose the duties of each were appointed every fortnight, in order that they might be equally shared by all. The young men above twenty years of age did not aid in the scouring of the floors and stairs, nor clean the shoes, grates, and yards, nor assist in the serving and waiting at meals, the preparation of vegetables and other garden-stuff for the cook. But the making of beds and all other domestic duty was a common lot; and the young men acted as superintendents of the other work.

This was performed with cheerfulness, though it was some time before the requisite skill was attained; and perfect order and cleanliness have been found among the habits most difficult to secure. The pupils and students were carefully informed, that these arrangements were intended to prepare them for the discharge of serious duties in a humble sphere, and to nerve their minds for the trials and vicissitudes of life.

The masters partook the same diet as the pupils, sitting in the centre of the room, and assisting in the carving. They encouraged familiar conversation (avoiding the extremes of levity or seriousness) at the meals, but on equal terms with their scholars, with the exception only of the respect involuntarily paid them.

After a short time a cow was bought, and committed to the charge of one of the elder boys. Three pigs were afterwards added to the stock, then three goats, and subsequently poultry

and a second cow. These animals were all fed and tended, and the cows were daily milked by the pupil teachers. It seemed important that they should learn to tend animals with care and gentleness; that they should understand the habits and the mode of managing these particular animals, because the schoolmaster in a rural parish often has a common or forest-right of pasture for his cow, and a forest-run for his pig or goat, and might thus, with a little skill, be provided with the means of healthful occupation in his hours of leisure, and of providing for the comfort of his family.

Moreover, such employments were deemed important, as giving the pupils, by actual experience, some knowledge of a peasant's life, and, therefore, truer and closer sympathy with his lot. They would be able to render their teaching instructive, by adapting it to the actual condition and associations of those to whom it would be addressed. They would be in less danger of despising the labourer's daily toil in comparison with intellectual pursuits, and of being led by their own attainments to form a false estimate of their position in relation to the class to which they belonged, and which they were destined to instruct. The teacher of the peasant's child occupies, as it were, the father's place, in the performance of duties from which the father is separated by his daily toil, and unhappily at present by his want of knowledge and skill. But the schoolmaster ought to be prepared in thought and feeling to do the peasant-father's duty, by having sentiments in common with him, and among these an honest pride in the labour of his hands, in his strength, his manual skill, his robust health, and the manly vigour of his body and mind.

The garden, on the arrival of our pupil teachers, was a wilderness of rubbish, withered grass, and weeds. Our first attention was directed to labours which were to insure the health of the students and pupil teachers, to invigorate their bodies, and make them strong and cheerful men. This was a matter of no mean importance. Many of the young men came to the school altogether unfitted for any common bodily exertion. Some, either from previous habits of inactivity, or from having followed some closely sedentary employment, were exceedingly weak. Slight labour in the garden produced profuse perspiration and exhaustion, or muscular cramps, pains, and even inflammation of the muscles of the chest. In two or three instances, the first attempt to labour in the garden (though cautiously commenced) brought on some slight febrile action, which confined the sufferer to the house for a day or two. Exposure to the weather was at first attended with colds or slight rheumatic attacks. In short, the young men were nearly all unaccustomed to any invigorating bodily exercise, and their first attempts to work required a certain period of transition, in which some caution was requisite.

At first, four hours were devoted every day to labour in the garden. The whole school rose at half-past five. The household-work occupied the pupil teachers altogether, and the students partially, till a quarter to seven o'clock. At a quarter to seven they marched into the garden, and worked till a quarter to eight, when they were summoned to prayers. They then marched to the tool-house, deposited their implements, washed, and assembled at prayers at eight o'clock. At half-past eight they breakfasted. From nine to twelve they were in school. They worked at the garden from twelve to one, when they dined. They resumed their labour in the garden at two, and returned to their classes at three, where they were engaged till five, when they worked another hour in the garden. At six they supped, and spent from seven to nine in their classes. At nine, evening prayers were read, and immediately afterwards they retired to rest. The subject of the routine of study and labour will be spoken of hereafter, and subsequent alterations described; and the periods of labour and study are here briefly related in reference only to the earliest period of our proceedings.

The garden (it has been said) was a wilderness of weeds. The first care of the masters was, that it should be regularly trenched over its whole surface; and as the loam was rich and deep, the weeds were buried under three feet of soil. This trenching required vigorous exertion, as the soil had not been disturbed to that depth for many years. The teachers laboured in the trenches, and we occasionally joined. The work, therefore, gradually restored order. As the weeds disappeared, the ground was sown with such garden seeds as would yield the most abundant and useful crop for the household consumption. Attention was this year confined to the most obvious necessities, because the state of the ground required so much labour, that little time could be bestowed in providing a variety of garden-stuff as a means of instructing the pupils in horticulture. The ground, it was expected, would be reclaimed before the ensuing spring; and at that period more comprehensive and systematic instruction in gardening was to commence.

During the past year, however, the garden has yielded almost all the vegetables and a very abundant supply of fruit for the use of the school. As the year advanced the crops were gathered and followed by others, cabbages and turnips succeeding the potatoes and peas; and where a large crop of mangel-wurzel had been grown for the cows, a green crop was sown for their consumption in the spring. The disturbance of the soil to so great a depth appeared to have the most beneficial influence on the trees. They bent under a load of fruit, by which the boughs of some were broken ere we were aware, and other boughs had to be dis encumbered and propped for their preservation.

In these labours the pupils and students rapidly gained strength. They almost all soon wore the hue of health. Their food was frugal, and they returned to it with appetites which were not easily satisfied. The most delicate soon lost all their ailments. One young man on his arrival was affected with a rheumatic inflammation of the joints, attended with signs of feebleness of constitution, which created some apprehension that this chronic inflammation would incapacitate him. Some perseverance enabled him to work in the garden, and the gymnastic exercises and drill, introduced at a later period, restored him to great muscular vigour. Another had been a tailor, and probably had seldom quitted his shopboard. His first attempts at labour in the garden occasioned inflammation of the muscles of the chest, and severe muscular pains all over the body, attended with much nervous agitation. These symptoms disappeared in about a week or ten days, after which he resumed his work in some light occupations, and by degrees became enured to the more severe, until, after some time, he was the most expert and vigorous athlete in the gymnastic exercises.

The gymnastic frame and the horizontal and parallel bars were not erected until the constitutional and muscular powers of the pupils and students had been invigorated by labour. After a few months' daily work in the garden, the drill was substituted for garden work during one hour daily. The marching exercise and extension movements were practised for several weeks; then the gymnastic apparatus was erected, and the drill and gymnastic exercise succeeded each other on alternate evenings. The knowledge of the marching exercise is very useful in enabling a teacher to secure precision and order in the movements of the classes or of his entire school, and to pay a due regard to the carriage of each child. A slouching gait is at least a sign of vulgarity, if it be not a proof of careless habits—of an inattention to the decencies and proprieties of life, which in other matters occasion discomfort in the labourer's household. Habits of cleanliness, punctuality, and promptitude are not very compatible with indolence, nor with that careless lounging, which frequently squanders not only the labourer's time, but his means, and leads his awkward steps to the village tavern. In giving the child an erect and manly gait, a firm and regular step, precision and rapidity in his movements, promptitude in obedience to commands, and particularly neatness in his apparel and person, we are insensibly laying the foundation of moral habits, most intimately connected with the personal comfort and the happiness of the future labourer's family. We are giving a practical moral lesson, perhaps more powerful than the precepts which are inculcated by words. Those who are accustomed to the management of large schools know of how much importance such lessons

are to the establishment of that order and quiet which is the characteristic of the Dutch schools, and which is essential to great success in large schools. A notion is prevalent in some of our English schools that a considerable noise is unavoidable, and some teachers are understood to regard the noise as so favourable a sign of the activity of the school, as even to assert, that the greater the noise the greater the intellectual progress of the scholars. The intellectual activity of the best Dutch schools is quite as great as that of any school in this country, and their average merit is exceedingly greater than that of the town schools of England; but a visitor seldom finds in a school of 700 children more than twelve persons speaking in the room at the same time, and those twelve persons are each speaking in a natural tone, and are distinctly heard. Such results do not depend solely or chiefly on the discipline of the drill-master, but they arise, in fact, from that minute attention to all the details of school organization which secures the greatest amount of attention from the pupil, with the least amount of disturbance to his fellows. In the result, however, attention to the *posture* and to the *movements* of the children is by no means an unimportant element.

The training of the pupil teachers and students in the marching exercises had not, therefore, reference solely to their own habits and health—to their own love of order, cleanliness, and propriety, but to the influence of the formation of such habits in them on their future scholars. Neither was it deemed an unimportant element of the discipline and organization of schools to enable the master to detect at a glance the cause of any disorder in inconvenient postures and ill-timed and inappropriate motions, which it is a part of the duty of an experienced master to control *by a sign.*

The gymnastic exercises were intended, in like manner, to prepare the teachers to superintend the exercises and amusements of the school playground. To instruct the children systematically in those graduated trials of strength, activity, and adroitness, by which the muscles are developed and the frame is prepared for sustaining prolonged or sudden efforts. The playground of the school is so important a means of separating the children from the vicious companions and evil example of the street or lane, and of prolonging the moral influence of the master over the habits and thoughts of his scholars, that expedients which increase its attractions are important, and especially those which enable the master to mingle with his scholars usefully and cheerfully. The schools of the Canton de Vaud are generally furnished with the proper apparatus for this purpose, and we frequently observed it in France and Germany.

The pupil teachers and students soon acquired considerable skill in these exercises. Their practice was interrupted by the

equinoctial rains, but resumed as soon as the frost brought with it more settled weather, and will be steadily pursued.

The physical training of our charge was not confined to these labours and exercises. Occasionally Dr. Kay accompanied them in long walking excursions into the country, in which they spent the whole day in visiting some distant school or remarkable building connected with historical associations, or some scene replete with other forms of instruction. In those excursions their habits of observation were cultivated, their attention was directed to what was most remarkable, and to such facts and objects as might have escaped observation from their comparative obscurity. Their strength was taxed by the length of the excursion, as far as was deemed prudent; and after their return home they were requested to write an account of what they had seen, in order to afford evidence of the nature of the impressions which the excursion had produced.

Such excursions usefully interrupted the ordinary routine of the school, and afforded a pleasing variety in the intercourse between ourselves and the teachers and pupils. They spurred the physical activity of the students, and taught them habits of endurance, as they seldom returned without being considerably fatigued.

Such excursions are common to the best normal schools of Switzerland. It is very evident to the educators of Switzerland that to neglect to take their pupils forth to read the great truths left on record on every side of them in the extraordinary features of that country, would betray an indifference to nature, and to its influence on the development of the human intelligence, proving that the educator had most limited views of his mission and of the means by which its high purposes were to be accomplished.

The great natural records of Switzerland, and its historical recollections, abound with subjects for instructive commentary, of which the professors of the normal schools avail themselves in their autumnal excursions with their pupils. The natural features of the country; its drainage, soils, agriculture; the causes which have affected the settlement of its inhabitants and its institutions; the circumstances which have assisted in the formation of the national character, and have thus made the history of their country, are more clearly apprehended by lessons gathered in the presence of facts typical of other facts scattered over hill and valley. England is so rich in historical recollections, and in the monuments by which the former periods of her history are linked with the present time, that it would seem to be a not unimportant duty of the educator to avail himself of such facts as lie within the range of his observation, in order that the historical knowledge of his scholar may be associated with these records, marking the progress of civilization in his native country. Few schools

are placed beyond the reach of such means of instruction. Where they do not exist, the country must present some natural features worthy of being perused. These should not be neglected. In book-learning there is always a danger that the thing signified may not be discerned through the sign. The child may acquire words instead of thoughts. To have a clear and earnest conviction of the reality of the things signified, the object of the child's instruction should as frequently as possible be brought under its eye. Thus, Pestalozzi was careful to devise lessons on objects in which, by actual contact with the sense, the children were led to discern qualities which they afterwards described in words. Such lessons have no meaning to persons who are satisfied with instruction by rote. But we contend that it is important to a right moral state of the intelligence that the child should have a clear perception and *vivid conviction* of every fact presented to its mind. We are of opinion that to extend the province of faith and implicit unreasoning obedience to those subjects which are the proper objects on which the perceptive faculties ought to be exercised, and on which the reason should be employed, is to undermine the basis of an unwavering faith in revelation, by provoking the rebellion of the human spirit against authority in matters in which reason is free.

To the young, the truth (bare before the sight, palpable to the touch, embodied in forms which the senses realize) has a charm which no mere words can convey, until they are recognised as the sign of the truth, which the mind comprehends. In all that relates to the external phenomena of the world, the best book is nature, with an intelligent interpreter. What concerns the social state of man may be best apprehended after lessons in the fields, the ruins, the mansions, and the streets within the range of the school. Lessons on the individual objects prepare the mind for generalizations, and for the exercise of faith in its proper province. Elementary schools, in which word teaching only exists, do not produce earnest and truthful men. The practice, prevalent in certain parts of the Highlands and Wales, of teaching the children to read English books, though they understand nothing of the English language, is about as reasonable as the ordinary mode of teaching by rote, either matters which the children do not understand, or which they do not receive with a lively conviction of their truth. The master who neglects opportunities of satisfying the intelligence of his pupil on anything that can be made obvious to the sense, must be content to find that when his lessons rise to abstractions he will be gazed upon by vacant faces. The mind will refuse a lively confidence in general truths, when it has not been convinced of the existence of the particular facts from which they are derived. From a master, accustomed to regard himself as the interpreter of nature: as the engrafter of thoughts

and not of words: and who is endeavouring to form the character of his pupils by inspiring them with an earnest love for truth, the pupils will gladly take much upon authority with a lively confidence. From the rote teacher they take nothing but words; he gains no confidence; it is difficult to love him, because it is not obvious what good he communicates; it is difficult to trust him, because he asks belief when he takes no pains to inspire conviction. What reverence can attach to a man teaching a Highland child to read English words, which are unmeaning sounds to him?

The excursions of the directors of the Swiss normal schools also serve the purpose of breaking for a time an almost conventual seclusion, which forms a characteristic of establishments in which the education of the habits, as well as the instruction of the intelligence, is kept in view. These excursions in Switzerland extend to several days, and even longer, in schools of the more wealthy classes. The pupils are thus thrown in contact with actual society; their resources are taxed by the incidents of each day; their moral qualities are somewhat tried, and they obtain a glimpse of the perspective of their future life. It is not only important in this way to know what the condition of society is, before the pupil is required to enter it, but it is also necessary to keep constantly before his eye the end and aim of education—that it is a preparation for the duties of his future life, and to understand in what respect each department of his studies is adapted to prepare him for the actual performance of those duties. For each class of society there is an appropriate education. The normal schools of Switzerland are founded on this principle. None are admitted who are not devoted to the vocation of masters of elementary schools. The three or four years of their residence in the school are considered all too short for a complete preparation for these functions. The time therefore is consumed in appropriate studies, care being taken that these studies are so conducted as to discipline and develope the intelligence; to form habits of thought and action; and to inspire the pupil with principles on which he may repose in the discharge of his duties.

Among these studies and objects, the actual condition of the labouring class, its necessities, resources, and intelligence, form a most important element. The teachers go forth to observe for themselves; they come back to receive further instruction from their master. They are led to anticipate their own relations to the commune or parish in which their future school will be placed. They are prepared by instruction to fulfil certain of the communal duties which may usefully devolve upon them; such as registrar, precentor, or leader of the church choir, and clerk to the associations of the village. They receive familiar exposiions of the law affecting the fulfilment of these duties.

The benefits derived from these arrangements are great; not only in furnishing these rural communes with men competent to the discharge of their duties, but the anticipations of future utility, and the conviction that their present studies enfold the germ of their future life, gives an interest to their pursuits, which it would be difficult to communicate, if the sense of their importance were more vague and indistinct.

To this end, in the excursions from Battersea we have been careful to enter the schools on our route, and lessons have been given on the duties attaching to the offices which may be properly discharged by a village schoolmaster, in connexion with his duty of instructing the young.

This general sketch may suffice to give an idea of the external relations of the life of a student in the training school, with the important exception of that portion of his time devoted to the acquirement of a practical knowledge of the duties of a schoolmaster in the village school. This may be more conveniently considered in connexion with the intellectual pursuits of the school. We now proceed to regard the school as a *household*, and to give a brief sketch of its familiar relations.

The period which has elapsed since the school was assembled is much too brief to enable us fully to realize our conception of such a household among young persons, to the majority of whom the suitable example had perhaps never been presented.

The most obvious truth lay at the threshold—a family can only subsist harmoniously by mutual love, confidence, and respect. We did not seek to put the Tutors into situations of inaccessible authority, but to place them in the parental seat, to receive the willing respect and obedience of their pupils, and to act as the elder brothers of the young men. The residence of one of us for a certain period, in near connexion with them, appeared necessary to give that tone to the familiar intercourse which would enable the Tutors to conduct the instruction, and to maintain the discipline, so as to be at once the friends and guides of their charge.

It was desirable that the Tutors should reside in the house. They rose at the same hours with the scholars (except when prevented by sickness), and superintended more or less the general routine. Since the numbers have become greater, and the duties more laborious, it has been found necessary that the superintendence of the periods of labour should be committed to each tutor alternately. They have set the example in working, frequently giving assistance in the severest labour, or that which was least attractive.

In the autumn, some extensive alterations of the premises were to a large extent effected by the assistance of the entire school. The Tutors not only superintended but assisted in the work. Mr.

Tate contributed his mechanical knowledge, and Mr. Horne assisted in the execution of the details. In the cheerful industry displayed on this and on other similar occasions we have witnessed with satisfaction one of the best fruits of the discipline of the school. The conceit of the pedagogue is not likely to arise among either students or masters who cheerfully handle the trowel, the saw, or carry mortar in a hod to the top of the building; such simplicity of life is not very consistent with that vanity which occasions insincerity. But freedom from this vice is essential to that harmonious interchange of kind offices and mutual respect which we were anxious to preserve.

The diet of the household is simple. The fruits and vegetables of the garden afford the chief variety without luxury. The teachers sit in the midst of their scholars. The familiar intercourse of the meals is intended to be a means of cultivating kindly affections, and of insuring that the example of the master shall insensibly form the habits of the scholar. Every day confirms the growing importance of these arrangements.

It has been an object of especial care that the morning and evening prayers should be conducted with solemnity. A hall has been prepared for this service, which is conducted at seven o'clock every morning in that place. A passage of Scripture having been read, a portion of a psalm is chanted, or they sing a hymn; and prayers follow, generally from the family selection prepared by the Bishop of London. The evening service is conducted in a similar manner. The solemnity of the music, which is performed in four parts, is an important means of rendering the family devotion impressive. We trust that the benefits derived from these services may not be transient, but that the masters reared in this school will remember the household devotions, and will maintain in their own dwellings and schools the family rite with equal care.

Quiet has been enjoined on the pupils in retiring to rest.

The Sunday has been partially occupied by its appropriate studies. The services of the church have been attended morning and evening; and, besides a certain period devoted to the study of the formularies, the evening has been spent in writing out from memory a copious abstract of one of the sermons. At eight o'clock these compositions have been read and commented upon in the presence of the whole school; and a most useful opportunity has been afforded for religious instruction, besides the daily instruction in the Bible. Mr. Eden has likewise attended the school on Friday, and examined the classes in their acquaintance with the Holy Scriptures and formularies of the Church. The religious department, generally, is under his superintendence.

The skill which they have acquired in singing has enabled Mr. Eden to create from the school a choir for the village church,

increasing the solemnity of the services by the manner in which the sacred music is performed.

The household and external life of the school are so interwoven with the lessons, that it becomes necessary to consider some of their details together, before the intellectual instruction is sepa rately treated.

The boys who were selected as apprentices were rather chosen on account of their characters than their acquirements, which were very meagre. The young men who have been admitted as students have frequently been found even worse prepared than the boys of thirteen years of age, chiefly brought from Norwood, though some of these young men had been in charge of village and workhouse schools. Their acquaintance even with rudimental knowledge would not bear the test of slight examination. With pupils and students alike, it was therefore found necessary to commence at an early stage of instruction, and to furnish them with the humblest elements of knowledge. The time which has elapsed since the school has opened ought therefore to be regarded as a preparatory period, similar to that which, in Germany, is spent from the time of leaving the primary school to sixteen, the period of entering the normal school, in what is called a preparatory training school.

As such preparatory schools do not exist in this country, we had no alternative. We selected the boys of the most promising character, and determined to wade through the period of preparation, and ultimately to create a preparatory class in the school itself. Our design was to examine the pupils of this class at the end of the first year, and to grant to such of them as gave proof of a certain degree of proficiency a certificate as *Candidates* of the training school. At the end of the second year's course of instruction, it is intended that a second examination shall occur, in which proficients may obtain the certificate of *Scholar*; and at the close of the ordinary course, in the third year, another examination is to be held, in which the certificate of *Master* will be conferred on those who have attained a certain rank intellectually, and who support their claims by a correct moral deportment.

The means of determining this proficiency will be described hereafter.

Training schools, developed on this design, would therefore consist of—

1. Preparatory classes of students and pupils.
2. A class of Candidates.
3. A class of Scholars.

And some students, who had obtained the certificate of Master

might remain in the school in preparation for special duties as the Masters of important *district schools*, or as Tutors in other training schools. These students would constitute—

4. A class of Masters.

Hitherto the training school has not passed the preparatory stage. No certificate of candidateship has been granted; and the examination of the qualifications of the students and pupils, by which they can acquire this certificate, will not occur till the end of March, at which period a certain number will have resided a year in the establishment. Another examination may probably take place on the 30th of June, and other certificates of candidateship may then be distributed to those who came to the school between March and June of last year.

The routine of preparatory classes was at an early period arranged according to the annexed table, which regulated the daily lessons of the school until the members of the first class were employed as pupil-teachers in assisting in the instruction of the village school.

DAILY ROUTINE.

Time	Occupation	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Half-past 5.	Rise, wash, dress, and make beds.						
Quarter to 6.	Household work, viz., scouring and sweeping floors, cleaning grates, shoes, knives, &c., pumping water, and preparing vegetables.						
Quarter to 7.	March into garden and commence garden work, feed pigs, poultry, and milk cows.						
Quarter to 8.	March from garden, deposit tools, and wash.						
8. . . .	Reading of Scriptures and prayer. (In the spring half an hour was commonly occupied in a familiar exposition of the passage of Scripture read.)						
After prayer.	Superintendents present reports.						
Half-past 8.	Breakfast.						
9 to half-past 9.	Classes united.	Reading in the Bible and religious instruction. Old Testament history.	Reading in the Bible and religious instruction. The Gospels.	Reading in the Bible and religious instruction. The Acts of the Apostles.	Reading in the Bible and religious instruction. The Epistles.	Committing to memory texts of Scripture.	Committing to memory texts of Scripture, or examination on the Scriptural reading of the week.
Half-past 9 to half-past 10.	First class.	Mechanics.	Arithmetic.	Mechanics.	Arithmetic.	Mechanics.	Weekly examination.
	Second class.	Arithmetic.	Mechanics.	Arithmetic.	Mechanics.	Arithmetic.	
Half-past 10 to 11.	First class.	Mental arithmetic.	Etymology.	Mental arithmetic.	Etymology.	Mental arithmetic.	Ditto.
	Second class.	Etymology.	Mental arithmetic.	Etymology.	Mental arithmetic.	Etymology.	
11 to 12 . .	Classes united.	Geography.	Geography.	Music.	Geography.	Geography.	Music.
12 to 1 . .	Garden work, feeding the animals, &c. &c. March to the house at 1, wash and prepare for dinner.						
Quarter-past 1.	Dinner.						

DAILY ROUTINE—*continued.*

		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
2 to 3 . .	Classes united.	Mechanical drawing.	Map drawing.	Mechanical drawing.	Common and isometrical perspective.	Map drawing.	Weekly examination.
3 to 4 . .	First class.	Algebra.	Use of the globes.	Mensuration.	Use of the globes	Algebra.	Ditto.
	Second class.	Grammar.	. .	Algebra.	. .	Grammar.	
4 to 5 . .	First class.	Natural history of birds.	Grammar.	Object lesson.	Grammar.	. .	Ditto.
	Second class.	Ditto.	Committing to memory arithmetical tables and rules of grammar, or mechanical formulæ.	. .	Committing to memory arithmetical tables and rules of grammar, or mechanical formulæ.	Committing to memory.	
5	March to garden work, feed pigs, poultry, &c., and milk cows.						
6	March from garden, wash, and prepare for supper.						
Quarter-past 6.	Supper.						
7	Drill and gymnastic exercises.						
8	Copying music or notes on geography, or mechanical formulæ, in the upper class room. During this period the History of England is read aloud. Another class practising singing in the lower class room.						
9	Reading of Scriptures and prayer.						
20 minutes past 9.	Retire to rest.						

SUNDAY.

After divine service one of the sermons of the day is written from memory. In the evening the compositions are read and commented upon, and the catechism or some other portion of the formularies of the church is repeated, with texts of Scripture illustrating it. Some of the elder students teach in the village Sunday-school.

The weekly examination was conducted orally during the day, until Dr. Kay's engagements in town rendered it necessary that some other method of examination should be adopted. As soon therefore as the attainments of the students and pupils appeared to warrant the experiment, an hour was daily appropriated to examination by means of questions written on the board before the class, the replies to which were worked on paper, in silence, in the presence of one of the tutors. This hour is, on successive days of the week, appropriated to different subjects; viz., grammar, etymology, arithmetic, mensuration, algebra, mechanics, geography, and biblical knowledge. The examination papers are then carefully examined by the tutor to whose department they belong, in order that the value of the reply to each question may be determined in reference to mean numbers, 3, 4, 5, and 6. These mean numbers are used to express the comparative difficulty of every question, and the greatest merit of each reply is expressed by the numbers 6, 8, and 10 and 12 respectively, the lowest degree of merit being indicated by 1.

The sum of the numbers thus attached to each answer is entered in the examination-book, opposite to the name of each pupil. These numbers are added up at the end of the week, and reduced to an average by dividing them by the number of days of examination which have occurred in the week. In a similar manner, at the end of the month, the sum of the weekly averages is, for the sake of convenience, reduced by dividing them by four; and a convenient number is thus obtained, expressing the intellectual progress of each boy. These numbers are not published in the school, but are reserved as an element by which we may be enabled to award the certificates of Candidate, Scholar, and Master.

The examination papers are in our possession after the close of each week; and we select certain of them for our special examination, in order that we may form an opinion of the intellectual progress of each pupil.

The examination for the quarterly certificates will necessarily also include the inspection of the writing, drawings, abstracts, and compositions. Oral examination will be required to ascertain the degree of promptitude and ease in expression of each pupil. They will likewise be required to give demonstrations of problems in arithmetic, algebra, and mechanics, on the black board; to describe the geography of a district in the form of a lecture, and to conduct a class before us, ere we award the certificates.

The examination of the pupils will gradually rise in importance, and the quarterly examinations will be marked by a progressive character, leading to the three chief examinations for the certificates of Candidate, Scholar, and Master, which will be distinguished from each other, both as respects the nature and number

of the acquirements, and by the degree of proficiency required in some branches which will be common to the three periods of study.

In another department of registration, we have thought it important to avoid certain errors of principle to which such registers appear to be liable. We have been anxious to have a record of some parts of moral conduct connected with habits formed in the school, but we have not attempted to register *moral merit.* Such registers are at best very difficult to keep. They occasion rivalry, and often hypocrisy. On this account we did not deem it advisable to require that they should be kept; but it was important that we should be informed of certain errors interfering with the formation of habits of punctuality, industry, cleanliness, order, and subordination; and registers were devised for noting deviations from propriety in these respects. First, a *time-book* is directed to be kept, in which the observance of the hour of rising, and of the successive periods marked in the routine of the school is noted, in order that any general cause of aberration may meet the eye at once. Secondly, one book is kept by the superintendents appointed from among the students to inspect the *household work above stairs,* another in relation to the *household work below stairs,* and a third by the Tutor having charge of *out-door labour.* In these books the duties assigned to each pupil are entered opposite to his name. The superintendent, at the expiration of the period allotted to the work, marks in columns under each of the following heads,—Subordination, Industry, Cleanliness, Order, —the extent of deviation from propriety of conduct by numbers varying from 1 to 4.

The register of punctuality in classes is kept by writing opposite to each pupil's name the number of minutes which elapse after the proper period before he enters the class. The sum of the numbers recorded in these books denotes the extent of errors in habits and manners into which any of the pupils fall, and directs our attention to the fact. Such records would, in connexion with the results of the examinations, enable us to determine whether, in reference to each period, a certificate of *Candidate, Scholar,* or *Master,* of the *first, second,* or *third* degree, should be granted.

The reports of the superintendents are presented to Dr. Kay immediately after morning prayers. The record is read in the presence of the school, and any appeal against the entry heard. At this period the relation which the entire discipline holds to the future pursuits of the pupils is from time to time made familiar to them by simple expositions of the principles by which it is regulated.

The tendency towards any error in the general conduct is indicated by the registers, and is at this period, if necessary, made the subject of mild expostulation.

Such expostulations have been needed in relation to such *precision* in the orderly management of the detail of *work* and *household service* as can perhaps only be attained by greater experience than the pupils have yet enjoyed.

The superintendents are chosen from among those students who appear to possess the requisite qualifications. We thus possess an unexceptionable means of distinguishing with offices of trust those in whom we can place most confidence, and of preparing them for the discharge of their future duties by accustoming them to a mild vigilance, to fidelity, impartiality, and firmness. On the other hand, the rest of the pupils learn subordination to those who, on account of these qualifications, exercise a limited degree of control over them, and are thus prepared to occupy subordinate positions if it be found necessary that they should be employed as assistants.

The special training of those who may hereafter take charge of district schools for pauper children has been fulfilled, by charging certain of the superintendents with other details of the domestic arrangements. For this purpose a Steward has been appointed among the young men, who has cut and weighed the provisions, and kept accounts resembling the "Provision Consumption Account" of a workhouse. The dietary has been found to preserve the pupils and students in florid health, under the physical and mental activity in which they have lived.

The dietary is hung in the steward's room, and guides him in cutting the rations for each meal.

It does not indicate the amount of vegetables and fruit in pies which are consumed; and it ought to be remarked that the fruit pies and vegetables have formed a wholesome and considerable part of the food of the household, which has perhaps been enjoyed with the greater relish as it is the product of the labours in the garden.

The influenza of the spring has been the only sickness which has occurred in the house, excepting those ailments which some of the students brought with them, a. d which disappeared as soon as they were accustomed to the routine of labour and instruction. Instead of sickness, numerous signs of increased strength, activity, and vigour are observed, which confirm the views by which the diet and the alternations of employment and study have been regulated.

This is the *household life* of the school. In proceeding to speak of the intellectual training, we premise that this report affords little opportunity for an explanation of the principles which have determined and regulated the preparatory course of instruction, and that we do not intend to anticipate the course which will be pursued in the future periods of study for the cer-

tificates of *Scholar* and *Master*. The questions which beset every step of this path could only be properly discussed in a work on pedagogy, resembling the numerous German publications on this subject. Brief hints only of these principles can find a place in the remarks we have to offer on the preparatory course.

The students have been stimulated in their application by a constant sense of the practical utility of their intellectual labours. After morning prayers, they are from day to day reminded of the connexion between their present and future pursuits, and informed how every part of the discipline and study has a direct relation to the duties of a schoolmaster. The conviction thus created becomes a powerful incentive to exertion, which might be wanting if those studies were selected only because they were important as a discipline of the mind.

The sense of practical utility seems as important to the earnestness of the student, as the lively conviction attending object teaching in the early and simplest form of elementary instruction. In the earliest steps an acquaintance with the real is necessary to lively conceptions of truth, and at a later period a sense of the value of knowledge resulting from *experience* inspires the strongest conviction of the dignity and importance of all truth, where its immediate practical utility is not obvious.

Far therefore from fearing that the sense of the practical utility of these studies will lead the students to measure the value of all truth by a low standard, their pursuits have been regulated by the conviction, that the most certain method of attaining a strong sense of the value of truths, not readily applicable to immediate use, is to ascertain by experience the importance of those which can be readily measured by the standard of practical utility. Thus we approach the conception of the momentum of a planet moving in its orbit, from ascertaining the momentum of bodies whose weight and velocity we can measure by the simplest observations. From the level of the experience of the practical utility of certain common truths, the mind gradually ascends to the more abstract, whose importance hence becomes more easily apparent, though their present application is not obvious, and in this way the thoughts most safely approach the most difficult abstractions.

In the humble pursuits of the preparatory course, a lively sense of the utility of their studies has likewise been maintained by the method of instruction adopted. Nothing has been taught *dogmatically*, but everything by the combination of the simplest elements; *i. e.* the course which a discoverer must have trod has been followed, and the way in which truths have been ascertained pointed out by a synthetical demonstration of each successive step. The labour of the previous analysis of the subject is the duty of the teacher, and is thus removed from the child.

The preparatory course is especially important, because the pupil's instruction is conducted on the principles which will guide him in the management of his own school. Having ascertained what the pupil knows, the teacher endeavours to lead him by gentle and easy steps from the known to the unknown. The instruction, in the whole preparatory course, is chiefly oral, and is illustrated, as much as possible, by appeals to nature, and by demonstrations. Books are not resorted to until the teacher is convinced that the mind of his pupil is in a state of healthful activity; that there has been awakened in him a lively interest in truth, and that he has become acquainted practically with the inductive method of acquiring knowledge. At this stage the rules, the principles of which have been orally communicated, and with whose application he is familiar, are committed to memory from books, to serve as a means of recalling more readily the knowledge and skill thus attained. This course is Pestalozzian, and, it will be perceived, is the reverse of the method usually followed, which consists in giving the pupil the rule first. Experience, however, has confirmed us in the superiority of the plan we have pursued. Sometimes a book, as for example a work on Physical Geography, is put into his hands, in order that it may be carefully read, and that the student may prepare himself to give before the class a verbal abstract of the chapter selected for this purpose, and to answer such questions as may be proposed to him, either by the tutor or by his fellows. During the preparatory course exercises of this kind have not been so numerous as they will be in the more advanced stages of instruction. Until habits of attention and steady application had been formed, it seemed undesirable to allow to the pupils hours for self-sustained study, or voluntary occupation. Constant superintendence is necessary to the formation of correct habits, in these and in all other respects, in the preparatory course. The entire day therefore is occupied with a succession of engagements in household work and out-door labour, devotional exercises, meals, and instruction. Recreation is sought in change of employment. These changes afford such pleasure, and the sense of utility and duty is so constantly maintained, that recreation in the ordinary sense is not needed. Leisure from such occupations is never sought excepting to write a letter to a friend, or occasionally to visit some near relative. The pupils all present an air of cheerfulness. They proceed from one lesson to another, and to their several occupations, with an elasticity of mind which affords the best proof that the mental and physical effects of the training are auspicious.

In the early steps towards the formation of correct habits, it is necessary that (until the power of self-guidance is obtained) the pupil should be constantly under the eye of a master, not dis-

posed to exercise authority so much, as to give assistance and advice. Before the habit of self-direction is formed, it is therefore pernicious to leave much time at the disposal of the pupil. Proper intellectual and moral aims must be inspired, and the pupil must attain a knowledge of the mode of employing his time with skill, usefully, and under the guidance of right motives, ere he can be properly left to the spontaneous suggestions of his own mind. Here, therefore, the moral and the intellectual training are in the closest harmony. The formation of correct habits, and the growth of right sentiments, ought to precede such confidence in the pupil's powers of self-direction, as is implied in leaving him either much time unoccupied, or in which his labours are not under the immediate superintendence of his teacher.

In the preparatory course, therefore, the whole time is employed under superintendence, but towards the close of the course a gradual trial of the pupil's powers of self-guidance is commenced; first, by entrusting him with certain studies unassisted by the teacher. Those who zealously and successfully employ their time will by degrees be entrusted with a greater period for self-sustained intellectual or physical exertion. Further evidence of the existence of the proper qualities will lead to a more liberal confidence, until habits of application and the power of pursuing their studies successfully, and without assistance, are attained.

The subjects of the preparatory course were strictly rudimental. It will be found that the knowledge obtained in the elementary schools now in existence is a very meagre preparation for the studies of a training school for teachers. Until the elementary schools are improved it will be found necessary to go to the very roots of all knowledge, and to rearrange such knowledge as the pupils have attained, in harmony with the principles on which they must ultimately communicate it to others. Many of our pupils enter the school with the broadest provincial dialect, scarcely able to read with fluency and precision, much less with ease and expression. Some were ill furnished even with the commonest rules of arithmetic, and wrote clumsily and slowly.

They have been made acquainted with the *phonic* method of teaching to read practised in Germany. Their defects of pronunciation have been corrected to a large extent by the adoption of this method, and by means of deliberate and emphatic syllabic reading, in a well sustained and correct tone. The principles on which the *laut* or *phonic* method depends have been explained at considerable length as a part of the course of lessons on method which has been communicated to them, and they will commence the practice of this method in the village school as soon as the lesson books now in course of printing are published.

We have deemed it of paramount importance that they should

acquire a thorough knowledge of the elements and structure of the English language. The lessons in reading were in the first place made the means of leading them to an examination of the structure of sentences, and practical oral lessons were given on grammar and etymology according to the method pursued by Mr. Wood in the Edinburgh Sessional School. The results of these exercises were tested by the lessons of dictation and of composition which accompanied the early stages of this course, and by which a lively sense of the utility of a knowledge of grammatical construction and of the etymological relations of words was developed. As soon as this feeling was created, the oral instruction in grammar assumed a more positive form. The theory on which the rules were founded was explained, and the several laws when well understood were dictated in the least exceptionable formulæ, and were written out and committed to memory. In this way they proceeded through the whole of the theory and rules of grammar before they were entrusted with any book on the subject, lest they should depend for their knowledge on a mere effort of the memory to retain a formula not well understood.

At each stage of their advance, corresponding exercises were resorted to, in order to familiarize them with the application of the rules.

When they had in this way passed through the ordinary course of grammatical instruction, they were intrusted with books, to enable them to give the last degree of precision to their conceptions.

In etymology the lessons were in like manner practical and oral. They were first derived from the reading lessons of the day, and applied to the exercises and examinations accompanying the course, and, after a certain progress had been made, their further advance was ensured by systematic lessons from books.

A course of reading in English literature, by which the taste may be refined by an acquaintance with the best models of style, and with those authors whose works have exercised the most beneficial influence on the mind of this nation, has necessarily been postponed to another part of the course. It, however, forms one of the most important elements in the conception of the objects to be attained in a training school, that the teacher should be inspired with a discriminating but earnest admiration for those gifts of great minds to English literature which are alike the property of the peasant and the peer; national treasures which are among the most legitimate sources of national feelings.

A thorough acquaintance with the English language can alone make the labouring class accessible to the best influence of English civilization. Without this, lettered men will find it difficult if not impossible to teach the vulgar.

Those who have had close intercourse with the labouring classes well know with what difficulty they comprehend words not of a Saxon origin, and how frequently addresses to them are unintelligible from the continual use of terms of a Latin or Greek derivation. Yet the daily language of the middling and upper classes abounds with such words, many of the formularies of our church are full of them, and hardly a sermon is preached which does not in every page contain numerous examples of their use. Phrases of this sort are so naturalized in the language of the educated classes, that entirely to omit them has the appearance of pedantry and baldness, and even disgusts persons of taste and refinement. Therefore, in addressing a mixed congregation, it seems impossible to avoid using them, and the only mode of meeting the inconvenience alluded to is to instruct the humbler classes in their meaning. The method we have adopted for this purpose has been copied from that first introduced in the Edinburgh sessional schools; every compound word is analyzed, and the separate meaning of each member pointed out, so that, at present, there are few words in the English language which our pupils cannot thoroughly comprehend, and from their acquaintance with the common roots and principles of etymology, the new compound terms, which the demands of civilization are daily introducing, are almost immediately understood by them. We believe that there are few acquirements more conducive to clearness of thought, or that can be more usefully introduced into common schools, than a thorough knowledge of the English language, and that the absence of it gives power to the illiterate teacher and demagogue, and deprives the lettered man of his just influence.

Similar remarks might be extended to style. It is equally obvious that the educated use sentences of a construction presenting difficulties to the vulgar, which are frequently almost insurmountable. It is therefore not only necessary that the meaning of words should be taught on a logical system in our elementary schools, but that the children should be made familiar with extracts from our best authors on subjects suited to their capacity. It cannot be permitted to remain the opprobrium of this country that its greatest minds have bequeathed their thoughts to the nation in a style at once pure and simple, but still inaccessible to the intelligence of the great body of the people.

In *writing*, they were trained, as soon as the various books could be prepared, according to the method of Mulhauser, which was translated and placed in the hands of the teachers for that purpose.

It is unnecessary to describe, in this place, a method of which the details will soon be accessible in the manual now printing.

It may be sufficient here to remark that both these methods

are eminently synthetical. They depend for their success on the delicacy of the analysis which they put into the hands of the teacher, and by which they enable him to present the simplest elements of knowledge first, and then to proceed in a regularly graduated series to those combinations which, if presented in the first instance, would occasion the pupil much difficulty and consequent discouragement.

In like manner, in *arithmetic*, it has been deemed desirable to put them in possession of the pre-eminently synthetical method of Pestalozzi. As soon as the requisite tables and series of lessons, analyzed to the simplest elements, could be procured, the principles on which complex numerical combinations rest were rendered familiar to them, by leading the pupils through the earlier course of Pestalozzi's lessons on numbers, from simple unity to compound fractional quantities; connecting with them the series of exercises in mental arithmetic which they are so well calculated to introduce and to illustrate. The use of such a method dispels the gloom which might attend the most expert use of the common rules of arithmetic, and which commonly afford the pupil little light to guide his steps off the beaten path illuminated by the rule.

The analysis in the lessons of Pestalozzi is so minute as to inspire all minds, who have attained a certain knowledge of number by other means, with a doubt whether time may not be lost by tracing all the minute steps of the analytical series over which his lessons pass. The opposite practice of dogmatic teaching is so ruinous, however, to the intellectual habits, and so imperfect a means of developing the intelligence, that it ought, we think, at all expense of time, to be avoided. With this conviction, the method of Pestalozzi has been diligently pursued.

Whilst these lessons have been in progress, the common rules of arithmetic have been examined by the light of this method. Their theory has been explained, and by constant practice the pupils have been led to acquire expertness in them, as well as to pursue the common principles on which they rest, and to ascertain the practical range within which each rule ought to be employed. The ordinary lessons on mental arithmetic have taken their place in the course of instruction separately from the peculiar rules which belong to Pestalozzi's series.

These lessons also prepared the pupils for proceeding at an early period in a similar manner with the elements of algebra, and with practical lessons in mensuration and land surveying.

These last subjects were considered of peculiar importance, as comprising one of the most useful industrial developments of a knowledge of the laws of number. Unless, in elementary schools, the instruction proceed beyond the knowledge of abstract rules,

to their actual application to the practical necessities of life, the scholar will have little interest in his studies, because he will not perceive their importance, and, moreover, when he leaves the school, they will be of little use, because he has not learned to apply his knowledge to any purpose. On this account, boys, who have been educated in common elementary schools, are frequently found, in a few years after they have left, to have forgotten the greater part even of the slender amount of knowledge they had acquired.

The use of arithmetic to the carpenter, the builder, the labourer, and artisan, ought to be developed by teaching mensuration and land surveying in elementary schools. If the scholars do not remain long enough to attain so high a range, the same principle should be applied to every step of their progress. The practical application of the simplest rules should be shown by familiar examples. As soon as the child can count, he should be made to count objects, such as money, the figures on the face of the clock, &c. When he can add, he should have before him shop-bills, accounts of the expenditure of earnings, accounts of wages. In every arithmetical rule similar useful exercises are a part of the art of a teacher, whose sincere desire is to fit his pupil for the application of his knowledge to the duties of life, the preparation for which should be always suggested to the pupil's mind as a powerful incentive to action. These future duties should be always placed in a cheering and hopeful point of view. The mere repetition of a table of numbers has less of education in it than a drill in the *balance step.*

Practical instruction in the *book-keeping* necessary for the management of the household was for these reasons given to those who acted as Stewards; accounts were kept of the seeds, manure, and garden produce, &c., as preparatory to a course of book-keeping, which will follow.

* The recently rapid development of the industry and commerce of this country by machinery creates a want for well-instructed

* It is somewhat remarkable that since this paragraph was written, I should have received a letter from one of the principal directors of a railway company, in which he informs me, that the frequent recurrence of accidents had induced the directors of the railway to make a careful examination into their causes. The directors rose from this inquiry convinced that these accidents were, to a large extent, attributable to the ignorance of the men whom they had been obliged to employ as engineers, for the want of better; and to the low habits of these men, who, though they do not subject themselves to dismissal by such a defiance of regulations as to be found "*drunk*," are in the habit of stupifying themselves with dram-drinking! The directors of the company had determined, that the proper remedy for these evils was to provide amusement and instruction for their men at night, and application has since been made to Mr. Tate, the tutor in mechanics, &c., in the training school, to afford his assistance in delivering lectures on mechanics to the engineers, stokers, and other servants of the company. A large room has been provided for these purposes, and it is understood to be the intention of the company to draw

mechanics, which in the present state of education it will be difficult adequately to supply. The steam-engines which drain our coal-fields and mineral veins and beds; which whirl along every railroad; which toil on the surface of every river, and issue from every estuary, are committed to the charge of men of some practical skill, but of mean education. The mental resources of the classes who are practically entrusted with the guidance of this great development of national power should not be left uncultivated. This new force has grown rapidly, in consequence of the genius of the people, and the natural resources of this island, and in spite of their ignorance. But our supremacy at sea and our manufacturing and commercial prosperity (inseparable elements) depend on the successful progress of those arts by which our present position has been attained.

On this account, we have deemed inseparable from the education of a schoolmaster a knowledge of the *elements of mechanics* and of the laws of heat, sufficient to enable him to explain the structure of the various kinds of steam-engines in use in this country. This instruction has proved one of the chief features even of the preparatory course, as we feared that some of the young men might leave the establishment as soon as they had obtained the certificates of Candidates, and we were unwilling that they should go forth without some knowledge at least of one of the chief elements of our national prosperity, or altogether without power to make the working man acquainted with the great agent, which has had more influence on the destiny of the working classes than any other single fact in our history, and which is probably destined to work still greater changes.

Knowledge and national prosperity are here in strict alliance. Not only do the arts of peace—the success of our trade—our power to compete with foreign rivals—our safety on our railways and in our steam-ships—depend on the spread of this knowledge, but the future defence of this country from foreign aggression can only result from our being superior to every nation in those arts. The schoolmaster is an agent despised at present, but whose importance for the attainment of this end will, by the results of a few years, be placed in bold relief before the public.

The Tutor to whom the duty of communicating to the pupils a knowledge of the laws of motion, of the mechanical powers and contrivances, and of the laws of heat, was committed, was selected

their servants to this room by such amusements as may be more attractive than the tavern—to excite their attention to subjects of instruction appropriate to their duties by a series of popular lectures—and then to open classes, when they may learn mechanics, and such of the elements of natural science as may be useful to them in their calling.

As a part of the amusements, application was made by one of the directors to Mr. Hullah to open a class like those of the artisans in Paris, and to instruct them in singing on the method of Wilhem.—J. P. KAY.

because he was a self-educated man, and was willing to avail himself of the more popular methods of demonstration, and to postpone the application of his valuable and extensive mathematical acquirements. By his assistance, the pupils and students have been led through a series of demonstrations of mechanical combinations, until they were prepared to consider the several parts of the steam-engine, first separately, and in their successive developements and applications, and they are at present acquainted with the more complex combinations in the steam-engines now in use, and with the principles involved in their construction and action.

In *geography* it has been deemed important that the Tutors should proceed by a similar method. The lessons on land surveying have familiarized the pupils with the nature and uses of maps. As one development of the art of drawing, they have been practised in map-drawing. For this purpose, among other expedients, the walls of one class-room have been prepared with mastic, in order that bold projections of maps might be made on a great scale.

Physical geography has been deemed the true basis of all instruction in the geography of industry and commerce, which ought to form the chief subject of geographical instruction in elementary schools. The tutor has first endeavoured to convince the pupils, that nothing which presents itself to the eye in a well drawn map is to be regarded as accidental. The boldness of the promontories; the deep indenture of the bays; the general bearings of the coast; are all referable to natural laws. In these respects the eastern and western coasts of England are in striking contrast, in appearance, character, and in the circumstances which occasion their peculiarities. The physical geography of England commences with a description of the elevation of the mountain ranges, the different levels, and the drainage of the country. The course, rapidity, and volume of the rivers are referable to the elevation and extent of the country which they drain. From the climate, levels, and drainage, with little further matter, the agricultural tracts of the country may be indicated, and when the great coal-fields and the mineral veins and beds, the depth of the bays and rivers are known, the distribution of the population is found to be in strict relation to certain natural laws. Even the ancient political divisions of the country are, on inspection, found to be in close dependence on its drainage. The counties are river basins, which were the first seats of tribes of population. If any new political distribution were to be made, it would necessarily, in like manner, be affected by some natural law, which it is equally interesting and useful to trace.

Geography, taught in this way, is a constant exercise to the reasoning powers. The pupil is led to trace the mutual de-

pendence of facts, which, in ordinary instruction, are taught as the words of a vocabulary. Geography taught in the ordinary way is as reasonable an acquisition as the catalogue of a museum, which a student might be compelled to learn as a substitute for natural history. A catalogue of towns, rivers, bays, promontories, &c., is even less geography than the well-arranged catalogue of a museum is natural history, because the classification has a logical meaning in the latter case, which is absent in the former.

The intelligent Tutor should feel himself bound to acquire sufficient knowledge to explain to his pupil the mutual dependence of the facts which the map presents to the eye. Thus it is easy to explain why certain tracts are rich pastures, why others are arable; to account for the climate, productions, industry, and commerce of such a county as Lancashire, and to read its history in the natural features of its hills, valleys, streams, coal-bed, rivers, and western site. London, originally the outport to Europe, now the outport to the world, presents a great problem, equally instructing and useful to work, compared with which, the facts of its being the capital of England, and situated on the Thames, (ordinarily taught,) are as the cipher detached from a numerical power. Its tidal river carrying vessels into the heart of the land; its position in relation to the old Norman possessions of the conquerors of this country; its subsequent position between the commerce of Europe and the richest tracts of England; the facilities which it affords equally for commerce with the East and the West Indies; the resources it derives from the Northumberland and Durham coal-fields, without which its prosperity would suffer a grievous blow from the rivalry of other outports to which coal-beds are readily accessible: these, and a multitude of other considerations, too numerous to relate in this place, constitute that lesson in geography which the mention of London suggests. Its very place in the map is determined by natural laws of the most positive character, and capable of strict definition.

Every county in England and Scotland is treated inductively in this manner, and its productions, the distribution of its population, &c., are referred to the operation of the natural laws, on which, in the beneficent providence of God towards our country, they are dependent.

In like manner, but in more general terms, the great streams of our commerce are described and accounted for. The colonies of England form the first step beyond this country, and beyond a general description of the world; and then follow those nations with which we have the most intimate commercial connexion.

This geography is examined in relation to the great commercial activity of England, and the influence of our industry on the Christian civilization of the world.

In like manner, the great internal changes of the country are

accounted for. The spread of agriculture over previously barren tracts; the drainage of former marshes; the influence of the coal-fields in creating great vortices of trade to which all the domestic manufactures are drawn; the laws affecting the importance of the respective outports, &c. &c.; are topics of important illustrations.

For the delivery of this course of instruction the present books and maps are found exceedingly defective. No good school books on geography exist, and the maps at present in use are mere outlines, neglecting most of the great features of physical geography, which is the basis, first, of the geography of commerce and industry, and then (in a natural series) of that statistical and political geography which should form a prominent element of the instruction given in schools for the middle classes.

Maps are wanted, in which the elevation and drainage of the country should be faithfully delineated, giving the chief coal-fields and mineral veins and beds; containing the soundings of the coast and harbours, and the chief means of internal commercial communication, such as canals, railroads, &c. On this basis should be depicted in colour the great agricultural tracts, as distinguished by soils; and the seats of the chief manufactures. Along the coast the chief streams of commerce should be shown; the fisheries; and the comparative amount of tonnage entering every port. The use of a few symbols would convey much important information respecting our internal relations.

Geographies should be prepared adapted to the use of such maps both by the teacher and by his scholars.

If such maps and books had been in existence, the Tutors of the training school would have been spared much labour, and the progress of their pupils would have been both more rapid and more satisfactory.

As a department of geographical instruction, the elements of the use of the globes in connexion with nautical astronomy has been cultivated with some diligence.

The further progress of the pupils in the geography of commerce and industry will be accelerated by the lectures which will now be delivered three days in the week by Mr. Hughes, one of the Professors of the College of Engineers, who has been appointed lecturer on this subject.

The outlines only of the history of England have been read, as preparatory to a course of instruction in English history, which is to form one of the studies of the second year. The history of England has been read in the evening as an exercise in the art of reading, and the examinations which have followed have been adapted only to secure general impressions as to the main facts of

our history. In the second year's course it is hoped that this general knowledge will be found useful.

Skill in *drawing* was deemed essential to the success of a schoolmaster. Without this art he would be unable to avail himself of the important assistance of the black board, on which his demonstrations of the objects of study ought to be delineated. His lessons on the most simple subjects would be wanting demonstrative power, and he would be incapable of proceeding with lessons in mechanics, without skill to delineate the machines of which his lessons treated.

The arts of design have been little cultivated among the workmen of England. Whoever has been accustomed to see the plans of houses and farm buildings, or of public buildings of a humble character from the country, must know the extreme deficiency of our workmen in this application of the art of drawing, where it is closely connected with the comfort of domestic life, and is essential to the skilful performance of public works. The survey now in progress under the Tithe Commissioners affords abundant evidence of the want of skill in map-drawing among the rural surveyors.

The improvement of our machinery for agriculture and manufactures would be in no small degree facilitated, if the art of drawing were a common acquirement among our artisans. Invention is checked by the want of skill in communicating the conception of the inventor, by drawings of all the details of his combination. In all those manufactures of which taste is a principal element, our neighbours, the French, are greatly our superiors, solely, we believe, because the eyes and the hands of all classes are practised from a very early age in the arts of design. In the elementary schools of Paris, the proficiency of the young pupils in drawing is very remarkable, and the evening schools are filled with young men and adults of mature or even advanced age, engaged in the diligent cultivation of this art. Last Midsummer, in some of the evening schools of the Brothers of the Christian Doctrine, classes of workmen were questioned as to their employments. One was an *ébéniste,* another a founder, another a clockmaker, another a paperhanger, another an upholsterer; and each was asked his hours of labour, and his motives for attendance. A single example may serve as a type. A man, without his coat, whose muscular arms were bared by rolling his shirt sleeves up to his shoulders, and who, though well washed and clean, wore the marks of toil on his white horny hands, was sitting with an admirable copy in crayon of *La Donna della Segiola* before him, which he had nearly completed. He was a man about 45 years of age. He said he had risen at five, and

had been at work from six o'clock in the morning until seven o'clock in the evening, with brief intervals for meals; and he had entered the morning class at eight o'clock to remain there till ten. He had pleasure, he said, in drawing, and that a knowledge of the art greatly improved his skill and taste in masonry. He turned round with a good-humoured smile, and added, he could live better on less wages than an Englishman, because his drawing cost him less than beer. Some thousand working men attend the adult schools every evening in Paris, and the drawing classes comprise great numbers whose skill would occasion much astonishment in this country. The most difficult engravings of the paintings of the Italian masters are copied in crayon with remarkable skill and accuracy. Complex and exquisitely minute architectural details, such, for example, as perspective views of the Duomo at Milan, or the cathedrals at Rouen or Cologne, are drawn in pen and ink, with singular fidelity. Some were drawing from plaster casts and other models. We found such adult schools in many of the chief towns of France. These schools are the sources of the taste and skill in the decorative arts, and in all manufactures of which taste is a prominent element, and which have made the designs for the calico printers, the silk and ribbon looms, the papers, &c. &c., of France, so superior in taste to those of this country, notwithstanding the superiority of our manufactories in mechanical combinations.

These considerations lead us to account drawing an important department of elementary education. The manufacturers of Lancashire are well aware how difficult it is, from the neglect of the arts of design among the labourers of this country, to procure any skilled draftsmen to design for the cotton or silk manufacturer. The elevation of the national taste in art can only be procured by the constant cultivation of the mind in relation to the beautiful in form and colour, by familiarizing the eye with the best models, the works of great artists, and beautiful natural objects. Skill in drawing from nature results from a careful progress through a well analyzed series of models. The interests of commerce are so intimately connected with the results to be obtained by this branch of elementary education, that there is little chance that it will much longer suffer the grievous neglect it has hitherto experienced.

The drawing classes at Battersea were first exercised in very simple models, formed of oblong pieces of wood, arranged in a great variety of forms by the master, according to a method observed in the Swiss and German schools. These were drawn in common and in isometrical perspective, the laws of perspective being at the same time carefully explained, and the rules applied in each case to the object which the pupil drew. A very little practice made us aware that a method comprising a more minute

analysis of form was necessary to the greatest amount of success. Some inquiries which were pursued in Paris put us in possession of the method invented by M. Dupuis; and a series of his models were purchased and brought over at the close of the autumn, for the purpose of making a careful trial of this method. Considerable difficulty was experienced in procuring the services of an artist to superintend the instruction; but at length the application of this method has been commenced, and is in progress.

The experience of the French Inspectors of schools (at an early period after the establishment of the system of inspection) convinced them that, to the perfection of *skill in drawing form*, the practice of drawing from models is necessary. The best copyists frequently, or rather generally, were found to fail in drawing even very simple natural objects on their first trials. In the drawing schools at Paris, in which the most elaborate engravings were admirably copied, an Inspector would discover that the pupils were unable to draw correctly the professor's desk and chair. It became, therefore, evident, that the copy could not stand in the place of the natural object. Copying works of art might be essential to one department of skill and taste; but it by no means necessarily gave skill in drawing from nature.

M. Dupuis was an Inspector, and, observing this defect, he invented a series of models, ascending from a simple line of wire through various combinations to complex figures. These models are fixed in an instrument on the level of the eye, and may, by the movement of the instrument, be placed in a varying perspective. By this means the pupil may learn to draw the simplest objects, and proceed by gradual steps through a series of combinations, of an almost insensibly increasing difficulty, until he can draw faithfully any object, however complex. The instrument which holds the object enables the teacher, by varying its position, to give at each lesson a series of demonstrations in perspective, applying the rules to objects of a gradually increasing complexity, until they are understood in their relations to the most difficult combinations. Thus practical skill and theoretical knowledge are in harmony in this instruction. The taste may afterwards be cultivated by drawing those works of art best adapted to create a just sense of the beautiful in form and colour.

That which a workman first requires is mechanical skill in the art of drawing. Nature itself offers many opportunities to cultivate the taste insensibly; and skill can be acquired only by careful and prolonged practice in the art of drawing from nature. In the more advanced parts of the course, we shall be able to satisfy ourselves as to the best mode of using the skill acquired for the formation of the taste.

In the Normal school at Versailles one year's instruction had sufficed to give the pupils a wonderful facility and skill in drawing

from models. Some complicated pneumatic apparatus, consisting of glass, mahogany, brass, and in difficult perspective, was drawn rapidly, and with great truth and skill. It is not, however, our intention to carry the instruction of our pupils in this art further than is necessary for the industrial instruction of their future scholars.

Some of the reasons inducing us to attach much importance to the cultivation of *vocal music* have already been briefly indicated. We regarded it as a powerful auxiliary in rendering the devotional services of the household, of the parish church, and of the village-school solemn and impressive. Our experience satisfies us that we by no means over-estimated this advantage, though all the results are not yet obtained which we trust will flow from the right use of these means.

Nor were we indifferent to the cheerfulness diffused in schools by the singing of those melodies which are attractive to children, nor unconscious of the moral power which music has, when linked with sentiments which it is the object of education to inspire. We regard school songs as an important means of diffusing a cheerful view of the duties of a labourer's life; of diffusing joy and honest pride over English industry. Therefore, to neglect so powerful a moral agent in elementary education as vocal music, would appear to be unpardonable. We availed ourselves of some arrangements which were at this time in progress, under the superintendence of the Committee of Council, for the introduction of the method of of M. Wilhem, which has been singularly successful in France. It affords us great satisfaction to say how much advantage the pupils of the training school have derived from the instruction they have received, during the development of this method, from Mr. Hullah, the gentleman selected by the Committee of Council to adapt the method of Wilhem, under their superintendence, to the tastes and habits of the English people. Mr. Hullah has devoted himself, with unceasing assiduity and great skill, to this important public duty; and his pupils will always remember with a pleasure, without any alloy, the delightful lessons they have received from him.

The method of Wilhem is simply an application of the Pestalozzian method of ascending from the simple to the general through a clearly analyzed series, in which every step of the progress is distinctly marked, and enables the pupil, without straining his faculties, to arrive at results which might otherwise have been difficult of attainment. Wilhem has not in any respect deviated from the well-ascertained results of experience, either in the theory of music, or in the musical signs; but he has with great skill arranged all the early lessons, so as to smooth the path of the student to the desirable result of being able to read music with ease, and to sing with skill and expression even difficult

music at sight. The progress of the pupils at Battersea has been very gratifying, and even in the brief period which has elapsed since the opening of the school, they sing music at sight with considerable facility. They have received, on the average, only two lessons weekly, each of an hour's duration, and until lately have not been permitted to practise in the intervals, lest they should contract bad habits before their sense of time and tune had been cultivated. Of late, they have been permitted to practise daily for one hour. Their progress has necessarily been less rapid than it would have been had the entire method been previously arranged, as it now is, in a complete and logical series, as the result of Mr. Hullah's valuable labour. Much time has necessarily been expended in copying music, which will be spared to those who follow, and who, after Easter, 1841, will possess the volume and singing tablets published by the Committee of Council on Education.

Those who desire further proof of the importance of the method of Wilhem should visit the Normal school at Versailles, various day schools at Paris, and especially the great assemblages of the working classes, which occur almost every evening in Paris, for the purpose of receiving instruction in vocal music. The most remarkable of these probably is at the Halle-aux-Draps, where from 300 to 500 artisans are almost every evening instructed, from eight to nine o'clock, in vocal music. M. Hubert, a pupil of Wilhem, conducts this great assembly, by the method of mutual instruction, with singular skill and precision. We know scarcely anything more impressive than the swell of these manly voices when they unite in chorus.

If the music of Handel and Haydn were better known by the professors of music at Paris, assuredly this would be the place in which to display its most remarkable effects. Even in the singing of Wilhem's solfeggios in harmony, or of the scale in harmony, such a volume of sound was poured forth, that the effects were very impressive.

A method which has succeeded in attracting thousands of artisans in Paris from low cabarets and miserable gambling-houses to the study of a science, and the practice of a captivating art, deserves the attention of the public. Mr. Hullah, in adapting the method of Wilhem to English tastes and habits, has both simplified and refined it. He has, moreover, adapted to it a considerable number of old English melodies, of great richness and character, which were fast passing into oblivion, and which may be restored to the place they once held in the affections of the people, being now allied with words expressive of the joys and hopes of a labourer's life, and of the true sources of its dignity and happiness.

We have assisted in the development of this method, being

convinced that it may tend to elevate the character of our elementary schools, and that it may be of great use throughout the country in restoring many of our best old English melodies to their popularity, and in improving the character of our vocal music in village churches, through the medium of the parochial schoolmaster and his pupils.

The pupils and students of the training school now conduct the vocal music in the Hon. and Rev. Robert Eden's church at Battersea, and, under Mr. Hullah's superintendence, they also manage the instruction of the village school in Singing.

When the preparatory course was sufficiently advanced, a series of lectures on the construction and organization of elementary schools, and on the theory and art of teaching, were commenced. They have resembled those given in the German and Swiss schools under the generic term Pædagogik.

They have treated of the general objects of education, and the means of attaining them. The peculiar aims of elementary education; the structure of school-houses in various parts of Europe; the internal arrangement of the desks, forms, and school apparatus, in reference to different methods of instruction, and the varieties of those methods observed in different countries. The theory of the discipline of schools. Its practice, describing in detail the different expedients resorted to in different countries for the purpose of procuring order, decorum, propriety of posture and manner, regularity and precision in movements, and in changes of classes and exercises, and especially the right means of securing the reverence and the love of the children. This last subject naturally connects the consideration of the mechanical and methodic expedients with the consideration of the sources of the schoolmaster's zeal, activity, and influence, on which much has been said. To these subjects have succeeded lectures on the great leading distinctions in the methods of communicating knowledge. When the distinguishing principles had been described, the characterestic features of the several methods were examined *generally*, and certain peculiar applications of each were treated. The application of these methods to each individual branch of instruction was then commenced, and this part of the course has treated of various methods of teaching to read, especially giving a minute description of the *phonic* method. Of methods of teaching to write, giving a special account of the method of Mulhauser. On the application of writing in various methods of instruction. Of methods of teaching to draw, giving a detailed account of that of M. Dupuis. Of methods of teaching arithmetic, in which the method of Pestalozzi has been carefully explained, and other expedients examined. This brief sketch may indicate the character of the instruction up to the period of

this report. Our desire is to anticipate as little as possible, but, on the contrary, to relate only what *has been done*. We have therefore only to add, that the instruction in Pædagogik is in its preparatory stage, and that the course will be pursued, in relation both to the general theory and practice, and to the special application of the theory and practice to the development of the village school, and of the training school, through the whole period of instruction, as that part of the studies of the pupils by which the mutual relations of these studies are revealed, and their future application anticipated.

We regard these lectures, combined with the zealous labour of the Hon. and Rev. Robert Eden, as the chief means by which, aided by the Tutors, such a tone of feeling can be maintained as shall prepare the teachers to enter upon their important duties, actuated by motives which will be the best means of ensuring their perseverance, and promoting their success.

The Brothers of the Christian Doctrine, who devote their lives a cheerful sacrifice to the education of the poorer classes of France, can be understood best by those who have visited their Noviciate and schools at Paris. From such persons we expect acquiescence when we say, that their example of Christian zeal is worthy of the imitation of Protestants. Three of the brothers of this order are maintained for a sum which is barely the stipend of one teacher of a school of mutual instruction in Paris. Their schools are unquestionably the best at Paris. Their manners are simple, affectionate, and sincere. The children are singularly attached to them. How could it be otherwise, when they perceive that these good men have no other reward on earth for their manifold labours than that of an approving conscience?

The *regime* of the *Noviciate* is one of considerable austerity. They rise at four. They spend an hour in private devotion, which is followed by two hours of religious exercises in their chapel. They breakfast soon afterwards, and are in the day schools of Paris at nine. They dine about noon, and continue their attention to the schools till five. They sup at six, and then many of them are employed in evening schools for the adults from seven to nine, or from eight to ten, when, after prayers, they immediately retire to rest.

No one can enter the schools of the Brothers of the Christian Doctrine without feeling instinctively that he is witnessing a remarkable example of the development of Christian charity.

With such motives should the teachers of elementary schools, and especially those who are called to the arduous duties of training pauper children, go forth to their work. The path of the teacher is strewn with disappointments, if he commence with a mercenary spirit. It is full of encouragement, if he be inspired with the spirit of Christian charity. No skill can compensate

adequately for the absence of a pervading religious influence on the character and conduct of the schoolmaster.

The discipline of the training school has been gradually developed with this design, and, under the faithful and judicious guidance of Mr. Eden, we trust, in the course of time, it may obtain some measure of success.

It is in this spirit that we have been anxious that the young pupils and students should, under the superintendence of Mr. Eden, and the immediate tuition of the master of the village school, undertake their duties in that scene of labour and instruction.

It is not our intention to say much on the arrangements which have been adopted in the village school, which has been connected with the training school only a few weeks. The first class of the training school has been divided into two sections, one of which supplies pupil teachers to the village school in the morning, and the other in the afternoon, each continuing their studies in the training school at the periods not thus occupied. The village school will, under the superintendence of Mr. Eden, be gradually developed as a school on the *mixed method* of instruction; but we cannot hope that anything like the precision in method which characterizes the continental schools should be attained in it, excepting after prolonged and unremitting attention to all the details of its discipline and management.

Such attention continued through the course of the three years' instruction necessary to the certificate of Master, will, we trust, furnish the village school with such a class of educators as may enable it to realize the chief features of those schools which are most worthy of imitation in the Protestant countries of Europe; but, before the expiration of the three years' course, we cannot hope it will be able to accomplish this design. At present, all that we feel warranted to say is, that we are very sensible of the great difficulties which lie in the way of success, and that much humble and patient exertion will be required to surmount them. The able and zealous superintendence of Mr. Eden affords the village school a prospect of success, which, under less vigilant and intelligent management, we should despair to attain.

We have secured for the village school the advantage of the services of Mr. M'Leod, recently the principal master of the school of industry at Norwood. He is aware of the great difficulty of assimilating an elementary school in this country to some of those forms of excellence which we have afforded him an opportunity of examining in Holland. He is therefore prepared to endeavour, by gradual improvements, in the course of time, to render the elementary school a scene in which the pupils of the training school may prepare themselves for the skilful performance of their future duties. The success of these efforts presup-

poses so much improvement in his assistant teachers and in the scholars, that we deem it prudent not to venture to anticipate results which it must be very difficult to attain.

The examination of the third quarter of the residence of several of our pupils is now just concluded.

The mode in which the daily examinations are conducted has already been described.

During the depth of winter, when the out-door labour is necessarily suspended, the place which these examinations occupy in the daily routine may be ascertained by the inspection of the subjoined tables:—

DAILY ROUTINE.

Half-past 5.	Rise, wash, dress, and make beds.						
Quarter to 6.	Household work, viz., scouring and sweeping floors, cleaning grates, shoes, knives, &c., pumping water and preparing vegetables, and milking cows.						
Quarter to 7.	Reading of Scriptures and prayers.						
Quarter past 7.	Superintendents present reports.						
Half-past 7.	Lecture on the theory and art of teaching, and on school discipline.						
Quarter-past 8.	Breakfast.						
Quarter to 9.	The first division of the first class go to the village school.						
		MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
		Examination Papers—					
9 to 10 . .	Second division, first class.	E. P. on mensuration.	E. P. on grammar and etymology.	E. P. on mechanics.	E. P. on arithmetic	E. P. on geography and globes.	E. P. on problems.
	Second class.	Arithmetic.	Algebra.	Arithmetic.	Mensuration.	Arithmetic.	Algebra.
10 to 11 . .	Second division, first class.	Drawing.	Algebra or mensuration.	Drawing.	Algebra or mensuration.	Drawing.	Grammar.
	Second class.	Drawing.	Grammar.	Drawing.	Grammar.	Drawing.	Grammar.
11 to 12 . .	Second division, first class.	Writing on Mulhauser's method.	Practising arithmetic on Pestalozzi's tables.	Writing on Mulhauser's method.	Practising arithmetic on Pestalozzi's tables.	Writing on Mulhauser's method.	Arithmetic.
	Second class.	Etymology.	Mental arithmetic.	Etymology.	Mental arithmetic.	Etymology.	Mental arithmetic.
12 o'clock .	The first division of the first class return from village school.						
12 to 1 . .	Garden work, feed the animals, &c. At 1 march to the house and prepare for dinner.						
,, . .	A class practising singing in the hall.						
Quarter past 1.	Dinner.						

DAILY ROUTINE—*continued.*

Time							
Quarter to 2.	The second division of the first class go to the village school.						
2 to 3 . .	First divisian first class. Drill and gymnastic exercises in fair weather; in rough weather a lesson on drawing.						
	Second class. Drill and gymnastic exercises in fair weather; in rough weather, reading.						
3 to 4 . .	First division first class. Examination papers.						
		MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
3 to quarter to 4.	Second class.	Writing on Mulhauser's method.	Use of the globes.	Writing on Mulhauser's method.	Use of the globes.	Writing on Mulhauser's method.	Use of the globes.
4 to quarter to 5.	First division, first class.	Writing on Mulhauser's method.	Practising arithmetic on Pestalozzi's method.	Writing on Mulhauser's method.	Practising arithmetic on Pestalozzi's method.	Writing on Mulhauser's method.	Surveying.
Quarter to 4 to quarter to 5.	Second class. Examination papers.						
Quarter past 4.	The second division of the first class return from village school.						
Quarter to 5 to 6.	Classes united. On Tuesday, Wednesday, and Friday, lectures upon the geography of commerce and industry. On Monday, and Thursday, writing out the notes of the lectures on geography, preceded by an examination of a quarter of an hour's duration.						
Quarter-past 6	Supper.						
7 to 8. . .	Classes united. Mechanics, Monday, Tuesday, Wednesday, Thursday, and Friday.						
8 to 9. . .	Classes united. Biblical reading; lesson on the manners and customs of the Jews, and on geography of Palestine, &c.						
9 o'clock . .	Prayer.						
20 min. past 9.	Retire to rest.						

SUNDAY.

One of the sermons of the day is written from memory.
In the evening these compositions are read and commented upon.

At the quarterly examination the usual routine is suspended, and examination papers are prepared by the tutors, containing a series of questions passing over the chief features of the studies of the quarter in each class.

The students and pupils have no intimation of the questions which will be proposed, but, three hours being allotted to each examination paper, the questions of a particular subject (as for example grammar) are distributed to each pupil in the assembled class. The pupils then attempt the solution of all the questions without the aid of books, and without assistance from the tutor, or from each other.

At the expiration of the three hours the replies to the questions are collected, and in the afternoon, a similar plan is pursued with some other subject, the examination papers of which are distributed without any prévious intimation of their nature.

In this way, in three or four days, all the subjects of instruction in the training school are brought under minute examination.

As soon as the answers are collected, they are examined, and the relative merit of each reply is ascertained. A mean number having been attached to each question, the merit of the reply is expressed in numbers above or below this mean, and thus the whole results of the examination may be tabulated, and the intellectual progress of each pupil ascertained.

The following series of questions were issued at the examination of the third quarter, which expired at Christmas. We submit them to you, because we are desirous that you should form an accurate opinion of the results of the instruction in the training school, during the preparatory course. The questions faithfully represent the general course of the instruction on the subjects to which they relate, and they are level to the capacity and attainments of the pupils.

In order that this may be more clearly evident to you, we have appended to the series of questions tables containing the name of each pupil, his age, and period of entrance into the training school, at the head of the columns. On the left side of each table a column contains the number of each question, and in the next column the mean number indicating the comparative difficulty of the question; then, under the name of each boy, the merit of the answer of each pupil is given in successive columns, and, in the same manner, the merit of the replies to each of the questions respectively is tabulated.

In order that you may possess a standard from which to determine the relative merit of the rest of the replies, we have likewise placed, in an Appendix, replies to the questions from most of the pupils, the comparative merit of which may be estimated by a reference to the numbers in the Tables.

The answers to the questions on religious instruction have not

been deemed simply an intellectual exercise, and the results in this case have not been tabulated. They were framed by the Hon. and Rev. Robert Eden, who has superintended the religious instruction of the training-school with unwearied assiduity. We are enabled to furnish you with a note, expressive of Mr. Eden's opinion of the general progress of the pupils in religious knowledge, during the three quarters of the preparatory course which have now elapsed.

Before submitting the questions to you, we are anxious to avoid one source of misconception, to which the plan of the school might be liable, in consequence of our reluctance to anticipate results, by describing the course we intend to pursue in the future parts of the course of instruction. The technical instruction in that knowledge which it will be the duty of the pupils to communicate in elementary schools, occupies a much greater portion of the time in the preparatory course than that which will be allotted to such studies in the two subsequent years.

Every month will now bring into greater prominence *instruction, theoretical and practical, in the art of teaching*. The outlines only of a future course of instruction in this most important element of the studies of a training school have been communicated. Some of the principles have been laid down, but the application of these principles to each subject of instruction, and the arrangement of the entire matter of technical knowledge, in accordance with the principles of elementary teaching, is a labour to which a large portion of the future time of the pupils must be devoted.

Those studies which will prepare them for the performance of collateral duties in the village or parish have not been commenced.

The instruction in the management of a garden; in pruning and grafting trees; in the relative qualities of soils, manures, and the rotation of garden crops, is to form a part of the course of instruction, after the certificate of candidate is obtained.

A course on the domestic economy of the poor will be delivered in the same year, which will be followed by another on the means of preserving health, especially with regard to the employments, habits, and wants of the working classes. Some general lectures on the relations of labour and capital will close this course.

Those parts of the present course of technical instruction which will obtain the largest share of attention in the year in which the *candidates* are trained, will be the geography of commerce and industry; mensuration, land-surveying, and mechanics; and the history of England, treated chiefly in relation to the progress of civilization, and especially of industry and the arts.

The religious instruction will develope itself under the guidance

of Mr. Eden, in its relations to those subjects of history in which it is desirable that the pupils should receive impressions consistent with Christian charity and truth.

This brief indication of that which lies immediately before the pupils of the training-school will, we trust, remove any apprehension which might be entertained that the technical character of certain of their present studies will overlay a large portion of the future course.

The spontaneous preparation for instruction in the village school, and which will require considerable and well-directed application to miscellaneous reading, will in itself be an obstacle to the continuance of the present extent of technical instruction. This spontaneous preparation must embrace many subjects collateral to the instruction in the school, but which must be communicated in a popular manner in an elementary school, requiring a re-arrangement of knowledge previously acquired in a technical form.

The chief source of any confidence we have in the course we have pursued, is derived from the inquiries respecting the routine of instruction in normal schools in certain parts of the continent.

We have, for your information, placed in the Appendix to this Report several tables, of the routine of studies in some of the chief normal schools in different parts of Europe. A comparison of these tables with the general sketch of the plans of the Battersea training-school, with which we have furnished you, will enable you to perceive how far our personal inquiries have guided us in the regulation of the training school, founded under your sanction.

We lay before you the questions of the third quarterly examination at Battersea, and the tabulated results of the replies. In the first of these tables, viz., that on grammar and etymology, we have given the age and day of the month when each pupil entered the school in the year 1840. It has not been deemed necessary to repeat this in each of the successive tables.

Religious Instruction.

THE HON. AND REV. ROBERT EDEN.

1. Give some of the passages of the New Testament which prove—
   1. The divinity of our Lord.
   2. The perpetuity of the church of Christ.
   3. The unlawfulness of worshipping any besides God.

2. On what occasion did our Lord declare himself to be Christ? When questioned on this point, how did he generally meet the question?

3. To what several proofs did he appeal as the evidence of his being sent from God?

4. How did he foretel his death, and his rising again from the dead?
5. When and where did our Lord recall the dead to life?
6. By whom and when was a similar miracle performed?
   1. Before his appearing on earth; and 2ndly, after our Lord's ascension.
7. In what respect particularly does he set himself forth as an example to us?
8. What prophecies foretold?
   1. His forerunner, John the Baptist.
   2. His place of birth.
   3. His chief place of preaching.
   4. His trial and desertion by his followers.
9. Give the meaning of the word atonement, etymologically?
10. What word is generally used in the New Testament to express the same meaning?
11. Connect atonement with animal sacrifices.
12. Under the Jewish dispensation, how was atonement effected for the sins of mankind?
13. How was atonement for sin made under the Christian dispensation?
14. What alone can support the most virtuous man under the thought of judgment? And why?
15. Prove from Scripture the divinity of the Holy Ghost.
16. What are termed the extraordinary operations of the Holy Ghost? What the ordinary?
17. Give Scripture proofs that the Sacraments are "generally necessary to salvation."
18. That they convey "an inward and spiritual grace."
19. Explain the meaning of the different petitions of the Lord's Prayer.

DEAR DR. KAY, *Vicarage, Battersea, January* 1, 1841.

You requested me to draw up a few questions upon theological subjects, in order to test the religious instruction given to the young men training at Battersea for the office of schoolmaster. I framed such as relate chiefly to those things which a Christian ought to know and believe to his soul's health. The questions required proof from Scripture. The answers were full and remarkably to the purpose, and, as no Concordance was used, I am quite satisfied that the students in general have not only an accurate and extensive knowledge of the Bible, but right views of the Christian dispensation. It is satisfactory to observe, that the best papers were returned by those young men who have been the longest in training, a proof that whilst much attention has been devoted to secular knowledge, their religious instruction has been in successful progress. I think it right to add, that their moral conduct during the year they have been located at Battersea has been excellent, as far as I can judge, and I have had almost daily intercourse with them.

I remain yours, very truly,

ROBERT EDEN.

QUESTIONS *on* GRAMMAR *and* ETYMOLOGY *proposed to both Classes.*

MR. B. HORNE.

1. Define the nine parts of speech.
2. Write the inflection of a noun, of which the plural ends in s; and give examples in sentences of the possessive, singular and plural.

GRAMMAR AND ETYMOLOGY.

ANSWERS.

First question, as answered by J. A. C——

1. A Noun is the name of any person, place, or thing. It is derived from nomen, a name.

2. A Pronoun is a word used instead of a noun to prevent tautology; or it has relation to some word, clause, or sentence going before it. It is derived from nomen, a name, and pro, for.

3. An Adjective is a word used with a noun (usually before it) to point out its quality, quantity, or extent. It is derived from jacio, to throw, and ad, to.

4. Article is the name given to the two adjectives *a* or *an* and *the*. These are used in a peculiar manner to point out the extent of the signification of a noun. "A" or "an" before a noun indicates that *any* noun of that particular species is intended. "The," on the contrary, not only points out the species of thing, but the particular thing of that species referred to. On this account the latter article is termed definite, and the former indefinite. It is derived from articulus, a little joint.

5. A Verb is a word which signifies to be, to do, or to suffer. It is so named from "verbum," a word, from its being that essential member without which no complete sentence can be constructed.

6. An Adverb is a word joined to verbs and adjectives; in the former case to show the time, place, or manner of an action, and, in the latter, to limit the degree of "quality, quantity, or extent." The adverb bears to the verb a relation analogous to that of the adjective to the noun. The signification of one adverb is frequently modified by another. Adverb is derived from verbum, a word, and ad, to.

7. A Conjunction is a word used to connect words, clauses, or sentences. This definition is true of all the words usually placed in this class, if their use be considered without relation to the sense of the passages in which they occur. But while they always *join* the *members*, they frequently *disjoin* the sense of a sentence. Grammarians have endeavoured to meet this difficulty by giving to several of these words the paradoxical name of disjunctive conjunctions, *i.e.* disjoining joiners. Conjunction is derived from jungo, to join, and con, together.

8. A Preposition is a word placed before a noun or pronoun in the objective case (or before a clause in the objective case), to show the relation in which it stands to the rest of the sentence. It is derived from pono, to place, and pre, before.

9. An Interjection is an exclamation of any kind. It is thus named from jacio, to throw, and inter, between, because it is usually introduced abruptly, and without any necessary connexion with the context.

Second question, as answered by C. C——

BOY.

Singular.	Plural.
Nom. Boy,	Nom. Boys,
Poss. Boy's,	Poss. Boys',
Obj. Boy,	Obj. Boys.

Examples.—1. There was a boy's cap left in the room. 2. The boys' clothes were brought home yesterday.

3. Write the inflection of a noun, of which the plural does not end in s; and give examples as before.

4. Write the inflection of all the personal pronouns.

5. Write the present and past indicative active of the verb to command, in the common, emphatic, and continuate forms.

Third question, as answered by W. H——.

MAN.

Singular.	Plural.
Nom. Man,	Nom. Men,
Poss. Man's,	Poss. Men's,
Obj. Man,	Obj. Men.

Examples. 1.—The man's course of life was very immoral 2. The men's hearts were softened at hearing his speech.

Fourth question, as answered by M. H——

FIRST PERSONAL PRONOUN, MASCULINE OR FEMININE.

Singular.	Plural.
Nom. I,	Nom. We,
Poss. My or mine,	Poss. Our or ours,
Obj. Me,	Obj. Us.

SECOND PERSONAL PRONOUN, MASCULINE OR FEMININE.

Singular.	Plural.
Nom. Thou,	Ye or you,
Poss. Thy or thine,	Your or yours.
Obj. Thee,	Obj. You.

THIRD PERSONAL PRONOUN, MASCULINE.

Singular.	Plural.
Nom. He,	Nom. They,
Poss. His,	Poss. Their or theirs,
Obj. Him,	Obj. Them.

THIRD PERSONAL PRONOUN, FEMININE.

Singular.	Plural.
Nom. She,	Nom. They,
Poss. Her or hers,	Poss. Their or theirs,
Obj. Her,	Obj. Them.

THIRD PERSONAL PRONOUN, NEUTER.

Singular.	Plural.
Nom. It,	Nom. They,
Poss. Its,	Poss. Their or theirs,
Obj. It,	Obj. Them.

Fifth question, as answered by A. D——

PRESENT INDICATIVE, ACTIVE.

Common Form.

Singular.	Plural.
1st Person. I command,	1st Person. We command,
2nd Person. Thou commandest,	2nd Person. Ye or you command,
3rd Person. He commands or commandeth,	3rd Person. They command.

Emphatic Form.

Singular.	Plural.
1st Person. I do command,	1st Person. We do command,
2nd Person. Thou dost command,	2nd Person. Ye or you do command.
3rd Person. He does or doth command,	3rd Person. They do command.

6. Write the present and perfect indicative passive of the same verb.

7. Conjugate the verbs to fall, to go, to run, and to sing, and give examples in sentences of the past indicative and perfect participle of each.

8. Define transitive and intransitive verbs, and give examples in sentences.

Continuate Form.

Singular.	Plural.
1st Person. I am commanding,	1st Person. We are commanding.
2nd Person. Thou art commanding,	2nd Person. Ye or you are commanding,
3rd Person. He is commanding,	3rd Person. They are commanding.

PAST INDICATIVE, ACTIVE.

Common Form.

Singular.	Plural.
1st Person. I commanded,	1st Person. We commanded,
2nd Person. Thou commandedst	2nd Person. Ye or you commanded,
3rd Person. He commanded,	3rd Person. They commanded.

Emphatic Form.

Singular.	Plural.
1st Person. I did command,	1st Person. We did command,
2nd Person. Thou didst command,	2nd Person. Ye or you did command,
3rd Person. He did command,	3rd Person. They did command.

Continuate Form.

Singular.	Plural.
1st Person. I was commanding,	1st Person. We were commanding.
2nd Person. Thou wast commanding,	2nd Person. Ye or you were commanding,
3rd Person. He was commanding,	3rd Person. They were commanding.

Sixth question, as answered by C. P——

PRESENT INDICATIVE, PASSIVE.

Singular.	Plural.
1st Person. Iam commanded,	1st Person. We are commanded,
2nd Person. Thou art commanded,	2nd. Person. Ye or you are commanded,
3rd Person. He is commanded,	3rd Person. They are commanded.

PERFECT INDICATIVE, PASSIVE.

Singular.	Plural.
1st Person. I have been commanded,	1st Person. We have been commanded,
2nd Person. Thou hast been commanded,	2nd Person. Ye or you have been commanded,
3rd Person. He has or hath been commanded.	3rd Person. They have been commanded.

Seventh question, as answered by G. K——

Present.	Past.	Perfect participle.
Fall,	Fell,	Fallen,
Go,	Went,	Gone,
Run,	Ran,	Run,
Sing,	Sang,	Sung.

Examples.—Soft as the dew from heaven descends,
His gentle accents *fell*.

These magnificent ruins have *fallen* to decay. I *went* to London. He has *gone* to his account. She *ran* aground. We have *run* a good race. We *sang* well. Let the Creator's name be *sung*.

9. How are the four compound tenses of the indicative active formed?
10. How are the tenses of the passive voice formed?
11. What verbs admit of a passive form?
12. What words, or form of words, may be the subject of any verb, or the object of a transitive verb?

Eighth question, as answered by W. M. L——

A transitive verb expressess action passing from an actor to an object; as, "Let *thee* and *me* the *battle* try." An intransitive verb expresses a state of being or action confined to the subject or agent; as, I *slept* soundly last night.

Ninth question, as answered by F. V. I——

1. The perfect tense is formed of the present indicative of the verb to have, and the perfect participle of the verb to be conjugated.
2. The pluperfect tense is compounded of the past indicative of the verb to have and the perfect participle of the verb to be conjugated.
3. The future tense is formed of the present of the verb shall or will, and the infinitive of any other verb, omitting its sign *to*.
4. The future perfect tense is compounded of the present of the verb shall or will, the infinitive of the verb have, omitting its sign *to*, and the perfeet participle of the verb to be conjugated.

Tenth question, as answered by S. A——

The tenses of the passive voice are formed from transitive verbs by adding the perfect participle of the transitive verb to the verb *to be*, through all its moods and tenses.

Eleventh question, as answered by W. W——

Transitive verbs only; but intransitive verbs are sometimes erroneously used in the form of the passive.

Twelfth question, as answered by H. W. W——

1st. A noun or pronoun in the singular.
2nd. A noun or pronoun in the plural.
3rd. An infinitive.
4th. A clause of a sentence.
5th. Two or more nouns or pronouns, infinitives, or clauses, connected by the conjunction and.

Thirteenth question, as answered by T. O——

1. The, the definite article limiting boast—boast, a noun, singular, neuter, part of the nominative to the verb await—of, a preposition, governing heraldry—heraldry, a noun, singular, neuter, objective, governed by the preposition of—the, the definitive article, limiting pomp—pomp, a noun, singular, neuter, part of the subject or nominative to await—of, a preposition governing power—power, a noun, singular, neuter, objective, governed by the preposition of—and, a conjunction, connecting the two clauses—all, an adjective, limiting advantages *understood*—that, a relative pronoun, plural, neuter, objective, governed by the transitive verb gave—beauty, a noun, singular. neuter, nominative to gave *understood*—all, an adjective, limiting advantages *understood*—that, a relative pronoun, plural, neuter, objective, governed by gave—wealth, a noun, singular, neuter, nominative to gave—e'er, for *ever*, an adverb of time—gave, a transitive verb, third person, singular, past indicative—await, a transitive verb, third person,plural, present, indicative—alike, an adverb—the, the definite article, limiting hour—inevitable, an adjective, limiting hour—hour, a noun, singular, neuter, objective, governed by the transitive verb await—the, the definite article, limiting paths—paths, a noun, plural, neuter, nominative to the verb lead—of, a preposition, governing glory—glory, a noun, singular, neuter, objective, governed by the preposition of—lead, a transitive verb, third person, plural, present, indicative, governing us *understood*—but, an adverb—to, a prepo-

13. Parse the following sentences:—

The boast of heraldry, the pomp of power,
And all that beauty, all that wealth e'er gave,
Await alike the inevitable hour,—
The paths of glory lead but to the grave.

2. The sun that shone bright all the day
Has now gone quite out of our sight;
And we must now hasten away,
For soon 'twill be darkness and night.

14. Scan the first line of each of the preceding passages of poetry.

sition, governing grave—the, the definite article, limiting grave—grave, a noun, singular, neuter, objective, governed by the preposition to.

2. The, the definite article, limiting sun—sun, a noun, singular, masculine, nominative to the verb *has*;—that, a relative pronoun, singular, masculine, nominative to shone—shone, an intransitive verb, third person, singular, past, indicative—bright, an adjective, used for the adverb *brightly*—all. an adjective, limiting day—the, the definite article, limiting day—day, a noun, singular, neuter, objective, governed by the preposition during *understood*—has, an intransitive verb, third person, singular, present, indicative—now, an adverb—gone, the perfect participle of the verb to go—*has gone*, an intransitive verb, third person, singular, perfect, indicative—quite, an adverb—*out of*, a preposition, governing *sight*—our, the first personal pronoun, plural, masculine or feminine, possessive, governed by sight—sight, a noun, singular, neuter, objective, governed by *out of*—and, a conjunction, connecting the two clauses—we, the first personal pronoun, plural, masculine or feminine, nominative to the verb *must*—must, an intransitive verb, first person, plural, present, indicative—now, an adverb—hasten, an intransitive verb, infinitive, governed by must—away, an adverb—for, a conjunction—soon, an adverb—it, the third personal pronoun, singular, neuter, nominative to the verb will—will, an intransitive verb, third person, singular, present indicative—be, an intransitive verb, infinitive, governed by will—*will be*, an intransitive verb, third person, singular, future, indicative—darkness, a noun, singular, neuter, nominative after the verb *to be*—and a conjunction, connecting darkness and night—night, a noun, singular, neuter, nominative after the verb *to be*.

Fourteenth question, as answered by W. R——

	Iambus.	Iambus.	Iambus.	Iambus.	Iambus.
1.	The-boast	of-her-	ald-ry	the pomp	of power.
	Iambus.	Anapæst.	Anapæst.		
2.	The sun	that shone bright	all the day.		

Fifteenth question, as answered by W. M.

1. You should admonish *him* that is inattentive.

He should be put in the objective case, because it is the object of the transitive verb admonish.

2. Let *each* esteem others better than *himself*

As *each* relates to every one singly, the pronoun should be made singular.

3. You must return immediately.

By return is meant to turn back, and therefore the word back is not required in this sentence.

4. Rapt into future times the bard *began*.

The action of beginning being past and finished, the verb should be in the past tense, and not the perfect participle.

5. O thou my lips inspire,
Who *touchedst* Isaiah's hallowed lips with fire.

The verb must agree with its nominative who, which is of the second person agreeing with thou.

6. In death the vanquished and the victor *lie*. Vanquished and victor, being both nominatives to the verb *lie*, that verb must be in the plural number.

15. Correct the errors, if any, in each of the following sentences:—
1. He that is inattentive, you should admonish.
2. Let each esteem others better than themselves.
3. You should return back immediately.
4. Rapt into future times, the bard begun,
A Virgin shall conceive—a Virgin bear a son.
5. O thou my lips inspire,
Who touched Isaiah's lips with fire.
6. In death the vanquished and the victor lies.
7. Who do you live with now?
8. It is true what you say, but it is not applicable to the point.
9. Thus ended the war with Antiochus, twelve years after the second Punic war, and two after it had begun.
10. Though the circumstance be extraordinary, it certainly did happen.

---

7. With *whom* do you live now? Whom must be in the objective case, because it is the object of the preposition with.

8. What you say *is* true, but it is not applicable to the point. There being no word or clause to which the pronoun *it* relates, and the meaning of the sentence being that the thing, or words, which you are saying is true, what you say, is the nominative to the verb *is;* and the pronoun is not required.

9. Thus ended the war with Antiochus two years after *it* had begun, and twelve years after the second Punic war. In the uncorrected form of this passage the pronoun *it* referred to the second Punic war, and the sentence meant the war with Antiochus ended twelve years after the second Punic war, and two years after the second Punic war began, which is quite a wrong idea.

10. Though the circumstance *is* extraordinary it certainly did happen. The latter part of the sentence, being in the past tense, shows that the circumstance was past and finished, therefore neither contingency nor futurity can be implied, which the verb in the former part of the uncorrected sentence does. Now when neither contingency nor futurity is implied the indicative is used.

Sixteenth question, as answered by J. T——

Omnipotent, from omnis, all, and poteus, powerful, *all powerful;* as, God is omnipotent. Apparent, from pareo, to appear, and ap for ad, to, evident or clear; as, It is apparent from what that boy has done that he is very slovenly. Paternal, from pater, a father, and al, of or belonging to, belonging to a father; as, He displayed paternal feelings in taking such great care of the child who was committed to his charge. Depend, from de, down, and pendeo, to hang, to hang upon or down; as, I depend upon my parents for my subsistence. Complete, from com, for con, together, and plenus, full, or pleo, to fill, finished; he gave me a complete copy of all Lord Byron's works. Complicated, from com, or con, together, and plico, to fold, entangled; as, He gave me a very complicated machine to explain. Portable, from porto, to carry, and the affix *abilis,* that can be, that can be carried; as, I once bought a portable writing desk. Sanctify, from sanctus, holy, and fio, to make, to make holy; as, "Sanctify the people, that they may come before me." Autograph, from autos, self, and grapho, to write, one's own hand writing; as, He gave me a copy of Shakespeare's autograph. Astronomy, from astron, a star, and nomos, a law, the science which relates to the laws which regulate the courses of the heavenly bodies; as, I like to study astronomy. Demagogue, from demos, the people, and ago, to lead, a leader of the rebellious part of the people; as, Frost, who was recently transported, was a demagogue. Topography, from topos, place, and grapho, to write, a description of the position of places; as, I saw, some time ago, a beautiful work, entitled "Biblical Topography." Zoology, from zoon, an animal, and logos, a discourse, a description of animals; as, It is very necessary that every teacher should be acquainted with zoology. Mnemonics, from mneo, to remember, the art of remembering; as, I have scarcely seen a good work on the sub-

16. Give the derivation, meaning, and application in sentences of omnipotent—apparent—paternal—depend—complete—complicated—portable—sanctify—autograph—astronomy—demagogue--topography—zoology—mnemonics—inundation—soliloquy.

17. Give the words derived from *quæro*, to seek, with meaning and application.

18. Give the words derived from *grapho*, to write, in the same manner.

EXAMINATION PAPERS.—GRAMMAR AND ETYMOLOGY.

FIRST DIVISION.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission.														
		P——, J. W.	B——, W. M., Aged 17, Admitted 12 Feb. 1840.	G——, J., Aged 15, Admitted 27 Jan. 1840.	T——, J., Aged 13, Admitted 27 Jan. 1840.	R——, W., Aged 16, Admitted 27 Jan. 1840.	C——, J. A.	I——, F. V.	W——, W., Aged 14, Admitted 6 Feb. 1840.	A——, S., Aged 19, Admitted 15 May, 1840.	E——, W., Aged 14, Admitted 27 Jan. 1840.	H——, W., Aged 19, Admitted 27 Jan. 1840.	F—— F. S., Aged 19, Admitted 25 June, 1840.	B—— J., Aged 20, Admitted 30 July, 1840.	W——, W., Aged 25, Admitted 30 June, 1840.	R——, George, Aged 16, Admitted 1 August, 1840.
1	6	10	10	7	10	10	12	10	7	10	5	10	8	9	8	8
2	3	3	3	3	4	3	3	3	3	3	2	3	3	3	3	2
3	3	3	3	3	4	3	4	3	3	3	3	3	3	3	2	2
4	5	8	8	8	7	8	8	8	8	6	8	8	7	6	6	8
5	4	6	6	6	6	6	6	6	6	6	6	6	6	4	6	6
6	4	6	6	4	6	6	6	6	5	6	6	6	6	..	6	6
7	5	10	10	9	10	10	10	10	10	9	9	9	10	7	8	8
8	3	6	6	6	6	8	8	6	6	6	6	6	3	6	4	6
9	4	8	8	8	7	8	4	8	8	8	8	8	7	6	5	..
10	3	4	4	3	..	4	4	4	3	4	3	4	4	3	4	..
11	3	4	3	4	3	3	3	3	4	3	3	3	3	..	3	..
12	5	8	6	7	8	8	6	8	7	5	7	5	5	6	4	..
13	12 {6, 6}	19	19	16	23	14	18	19	16	21	21	17	16	14	15	6
14	4	6	6	2	6	6	6	6	6	..	2	2	2	3	..	..
15	6	12	10	9	10	9	9	10	10	10	6	8	9	..	..	..
16	8	16	15	12	15	14	14	12	15	14	7	..	8	..	..	..
17	6	14	13	12	7	6	5	2	4	..	6	..	..	3	..	..
18	6	12	14	10	..	3	5	..	..	..	8	2	..	..	..	..
Tot.	90	155	150	129	132	129	131	124	121	114	116	100	100	73	74	52

The ages are stated as their age at their last birthday.

ject of mnemonics. Inundation, from unda, a wave, and in, into, with tion, the act, a breaking in of the water on the land; as, Egypt is fertilized by the frequent inundations of the Nile. Soliloquy, from solus, alone, and loquor, to speak, a discourse by one's self alone; as, It was just break of day when he began to utter his beautiful soliloquy.

Seventeenth question, as answered by J. W. P——

Question—the act of asking or seeking. A question was put to me last night about you. Request, to ask again. I request that you will not violate my orders.

HIGHEST VALUE OF THE QUESTIONS 160.

SECOND DIVISION.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission.														
		C——, C., Aged 13, Admitted 27 Jan. 1840.	L——, W. M., Aged 17, Admitted 7 Feb. 1840.	W——, H. W., Aged 14, Admitted 27 Jan. 1840.	C——, H., Aged 15, Admitted 1 Feb. 1840.	P——, C., Aged 13, Admitted 21 Feb. 1840.	A——, W., Aged 16, Admitted 21 March, 1840.	H——, M., Aged 15, Admitted 7 April, 18:0.	O——, T., Aged 18, Admitted 25 June, 1840.	D——, J., Aged 14, Admitted 26 June, 1840.	D——, A., Aged 17, Admitted 28 Oct. 1840.	K——, George, Aged 17, Admitted 16 June, 1840.	$——, J., Aged 25, Admitted 20 April, 1840.	G——, W., Aged 22, Admitted 22 Nov. 1840.	B——, R., Aged 15, Admitted 21 Feb. 1840.	S——, S., Aged 16, Admitted 5 August, 1840.
1	6	10	8	9	9	11	9	9	9	9	9	10	9	10		8
2	3	4	3	3	3	4	3	3	4	3	2	..	2	2		3
3	3	3	3	3	3	4	3	3	4	3	2	..	2	3		3
4	5	8	8	8	8	8	6	8	8	8	6	..	8	7		4
5	4	3	6	6	6	6	6	6	6	6	6	..	6	4		4
6	4	6	4	4	3	6	3	3	6	6	3	..	3	3		6
7	5	9	8	7	6	8	6	10	10	8	6	10	4	..		8
8	3	5	6	6	6	4	4	6	6	4	4	6	..	6		4
9	4	7	8	8	8	2	6	7	8	6	8	..	..	..	Sick.	6
10	3	3	4	2	4	..	3	4	..	3	..	..	3	..		4
11	3	3	3	3	3	3	3	3	..	3	..	..	..	..		3
12	5	8	7	6	7	..	6	8	..	4	6	..	..	..		..
13	12 {6, 6}	14	19	21	18	19	18	15	23	..	11	8	..	..		10
14	4	4	3	..	5	..	..	..	..	..	..	..	..	..		..
15	6	..	9	6	6	8	..	4	..	..	..	..	..	..		..
16	8	15	6	7	..	10	11	..	..	..	..	..	..	..		..
17	6	8	..	..	..	..	4	..	..	6	..	8	..	..		..
18	6	4	6	..	..	..	3	..	..	4	..	3	..	..		..
Tot.	90	114	111.	99	95	93	94	89	84	73	63	45	37	35		63

Inquire, to seek into. Inquire into that affair. Acquire, to ask to, but this word is more frequently used in the sense of obtaining. He has acquired all his knowledge by intense study. Requisite, required or asked again. Air is requisite for the support of life. * Inquest, an inquiry into, or a judicial inquiry. Inquests are held upon the bodies of those who die suddenly in this country. Quest, a seeking or search. I went in quest of you yesterday. Exquisite, seeking or searching for. He was a gourmand of exquisite taste. Disquisition, seeking from or out of. There are many disquisitions written upon the unity of the Trinity. Unrequested, not asked. He came to the banquet unrequested. Unquestionable, that need not be asked or doubted. It is an unquestionable fact that all men are sinners. Reinquire, to ask into again. I have forgotten at what time the vessel sails, but I will reinquire. Perquisite, a free gift. The value of some offices is greatly enhanced by the perquisites.

Eighteenth question, as answered by J. G——

Graphic, well described; as, he gave a graphic description of the whole circumstance. Chirography, hand-writing. Caligraphy, beautiful writing. Hagiographa, a writing about holy things. Geography, a writing of the earth. His knowledge of geography was very limited. Lithography, writing upon stone. Stenography, short-hand writing. Biography, a writing of men's lives; as, biography should be

ARITHMETICAL QUESTIONS *proposed to the First Class.*

MR. B. HORNE.

1. Find the value of $421\frac{4}{5}$ cwt. of sugar at £3. 2*s*. 6*d*. per cwt. by as many methods as you can.

2. If four numbers are proportional, the product of the extremes is equal to the product of the means. Illustrate this by an example, and from it deduce the Rule of Three.

studied with a view to improve by the examples of which we read. Autograph, one's own hand-writing. Topography, a description of places. Lexicography, a writing of dictionaries. Lexicographer, one who writes a dictionary. I last week read an amusing conversation between a peasant and a lexicographer. Telegraph, literally distant writing; a means by which persons at a distance communicate a knowledge of events which take place at one locality. Pantograph, an instrument for copying all kinds of drawings to any required scale. Anagram, a transposition of letters in a word to form a new one. Paragraph, a division of writing. Diagram, literally, written through, a mathematical drawing. Grammar, the art of correct writing. Polygraph, an instrument for multiplying copies. Epigram, a short poem ending in a point. Grammarian, one who writes correctly. Ungrammatical, not grammatical or according to the rules of grammar. Geographer, one who writes geography. Orthography, correct spelling. Typography, a writing by types.

ARITHMETIC.—FIRST DIVISION.

First Question, as answered by W. H——

$10 \times 10 \times 4 + 20 + 1 + \frac{4}{5} = 421\frac{4}{5}$

£	s.	d.	
3	2	6	
		10	
31	5	0	
		10	
312	10	0	
		4	
1250	0	0	= 400
62	10	0	= 20
3	2	6	= 1
2	10	0	= $\frac{4}{5}$
£1318	2	6	= $421\frac{4}{5}$

s. d.				
2 6	$\frac{1}{8}$	421		
		3		
		1263		
		52	12	6
	Value of $\frac{4}{5}$ =	2	10	0
		£1318	2	6

Cwt.		Cwt.		£. s. d.
1	:	$421\frac{4}{5}$	::	3 2 6
5		5		20
5		2109		62
				12
				750

1 : 2109 :: 150

$$\frac{2109 \times 150}{1} = \frac{316350}{1} \text{ d.} = £1318\ 2\ 6.$$

d.
12) 6
20)2·5
3·125 = £3 2 6

Cwt. Cwt.
$421\frac{4}{5} = 421{\cdot}8$

3. Apportion £360 on 3 parishes, whose average poor rates are £1500, £1000, and £900 respectively.

4. Find the amount, at simple and compound interest, of £640 for 4 years at 5 per cent. Work for compound interest by both methods.

5. Find the present worth of £623. 3*s*., due 9 months hence, reckoning interest at 4 per cent. Find also the true and the banker's discount.

6. Define a fraction.

7. Reduce $16\frac{1}{8}$ to the form of a fraction.

$$\overset{\pounds.}{3\cdot125} \times \overset{\text{Cwt.}}{421\cdot8} = \overset{\pounds.}{1318\cdot125} = \overset{\pounds.}{1318}\ \overset{s.}{2}\ \overset{d.}{6}$$

$$\pounds3\ \ 2\ \ 6 = \pounds3\tfrac{1}{8} = \overset{\pounds.}{\frac{25}{8}} \qquad \overset{\text{Cwt.}}{421\tfrac{4}{5}} = \frac{2109}{5}$$

$$\frac{5}{8} \times \frac{2109}{1} = \frac{10545}{8} = \pounds1318\ \ 2\ \ 6$$

Second Question, as answered by J. T——

Example, 4 : 8 :: 6 : 12. The two extremes in this case are 4 and 12, which multiplied together, equal 48. The two means are 8 and 6, which multiplied together, also equal 48. Therefore, the product of the extremes equals that of the means; and this being the case, if we have the two means given, and the first extreme, we can find the other extreme, or 4th term. Thus, if we have 4 : 8 :: 6, and require the 4th term, the statement will be $\frac{8 \times 6}{4}$; because we require a number, which multiplied by 4, will produce 8 × 6, or 48, and to find this number, we must divide 48 by 4.

Third Question, as answered by J. T——.

£.
1500
1000
900
£3400

£. £. £.
34 : 15 :: 360.

$$\frac{15 \times 360}{34} =$$ the share of the parish, whose rates were £1500 = £158. 16*s*. $5\frac{1}{2}d.\frac{10}{17}$.

34 : 10 : : 360.

$$\frac{10 \times 360}{34} =$$ the share of the parish, whose rates were £1000 = £105. 17*s*. $7\frac{3}{4}d.\frac{1}{17}$.

34 : 90 : : 360.

$$\frac{9 \times 360}{34} =$$ the share of the parish, whose rates were £900 = £95. 5*s*. $10\frac{1}{2}d.\frac{6}{17}$.

	£.	s.	d.
Proof	105	17	$7\frac{3}{4}\frac{1}{17}$;
	158	16	$5\frac{1}{2}\frac{10}{17}$;
	95	5	$10\frac{1}{2}\frac{6}{17}$;
	£360	0	0 · ·

Fourth Question, as answered by S. A——

$$\frac{\overset{\pounds.}{640} \times 5}{100} = \pounds32;$$ then 32 × 4 = £128 interest for 4 years.

And 128 + 640 = £768. Amount at simple interest.

1·05 = amount of £1, for 1 year, at 5 per cent.

$(1\cdot05)^4 = 1\cdot21550625 \times 640 = \pounds777\ \ 18\ \ 5\frac{3}{4}\frac{1}{25}$ = amount at compound interest.

8. Simplify $\frac{3}{4}$ of $\frac{5}{9}$ of $\frac{8}{15}$ of 2.

9. Simplify $\frac{7}{10}$ of $\frac{2}{3}$ of $\frac{3}{4}$ of $\frac{13\frac{1}{2}}{7}$.

10. Reduce $\frac{1}{2}$, $\frac{3}{4}$, and $\frac{5}{8}$ to a common denominator, by using lines, and find the sum of these fractions.

11. Find the sum of $\frac{3}{5}$ £, $\frac{3}{4}$ guinea, $\frac{1}{6}$ of a crown, and $2\frac{1}{2}d$.

12. Prove that the product of one fraction by another must be less than unity, and multiply $\frac{3}{4}$ by $\frac{1}{2}$.

	£.			
$\frac{1}{20}$	640			
	32			= 1st year's interest.
$\frac{1}{20}$	672			= 2nd year's principal.
	33	12		= 2nd year's interest.
$\frac{1}{20}$	705	12		= 3rd year's principal.
	35	5	$7\frac{1}{4}\frac{4}{5}$	= 3rd year's interest.
$\frac{1}{20}$	740	17	$7\frac{1}{4}\frac{4}{5}$	= 4th year's principal.
	37	0	$10\frac{1}{4}\frac{6}{25}$	= 4th year's interest.
	£777	18	$5\frac{3}{4}\frac{1}{25}$	= amount.

Fifth Question, as answered by S. A——

$\frac{3}{4}$ of £4 = £3, or the interest of £100 for 9 months.

£100 + 3 = £103 = amount of £100 for 9 months.

Then £103 : £623. 3*s*. : : £100

20	20
2060	12463

$$\frac{12463 \times 100}{2060} = \text{the present worth} = £605.$$

$$\frac{£623.\ 3s. \times 4}{100} = £24.\ 18s.\ 6d. = \text{interest for 1 year.}$$

$\frac{3}{4}$ of £24. 18*s*. 6*d*. = £18. 13*s*. $10\frac{1}{2}d.$, or banker's discount.

£623. 3*s*. − £605. = £18. 3*s*., or the true discount.

Sixth Question, as answered by J. W. P——

A fraction is any part or parts of unity; thus $\frac{1}{4}$, or a farthing, is the fraction of a penny, when a penny is unity, or a farthing is $\frac{1}{960}$ when unity is £1.

Seventh Question, as answered by Mr. J. W. P——.

$$16\frac{1}{8} = \frac{16 \times 8 + 1}{8} = \frac{129}{8}$$

That is, the $\frac{1}{8}$ is the fraction of unity, the denominator or figure under the line signifies into how many parts unity is to be divided, and the numerator the number of parts that are to be taken. There are 16 units, and as 1 unit here contains 8 parts, there must be 16 times 8 parts, or 16 times 8, and $\frac{1}{8}$ also, or the fraction which is more than the 16 units. The sum of these is $\frac{129}{8}$.

Eighth Question, as answered by J. W. P——

$$\frac{3}{4} \text{ of } \frac{5}{9} \text{ of } \frac{8}{5} \text{ of } 2 = \frac{\overset{1}{\cancel{3}} \times \overset{1}{\cancel{5}} \times \overset{2}{\cancel{8}} \times 2}{\underset{1}{\cancel{4}} \times \underset{3}{\cancel{9}} \times \underset{3}{\cancel{15}} \times 1} = \frac{4}{9}.$$

Ninth Question, as answered by J. W. P——

$$\frac{7}{10} \text{ of } \frac{2}{3} \text{ of } \frac{3}{4} \text{ of } \frac{13\frac{1}{2}}{7} = \frac{\cancel{7} \times \cancel{2} \times \cancel{3} \times 27}{10 \times \cancel{3} \times \cancel{4} \times \cancel{14}} = \frac{27}{40}, \text{ fraction required.}$$

13. Divide $\frac{1}{2}$ by $\frac{1}{4}$.

14. Explain the principle of the rule for dividing one fraction by another.

15. A person possessed of $\frac{3}{4}$ of a ship, sold $\frac{1}{8}$ of his share, what part of the ship had he remaining?

16. If I sell $\frac{3}{4}$ of $\frac{1}{4}$ of a ship for £610, what is the whole ship worth at the same rate?

17. If $\frac{3}{4}$ of a yard cost $\frac{3}{8}$ £, what will $61\frac{1}{2}$ yards cost?

18. A can perform a piece of work in 6 days, B in 8 days, and C in 10 days. In what time can they perform it working together?

Tenth Question, as answered by J. W. P——.(See Diagram in p. 278, Quest. 16.)

$$\frac{1}{2}, \frac{3}{4} \text{ and } \frac{5}{8} = \frac{4}{8}, \frac{6}{8}, \frac{5}{8}$$

$$\frac{4}{8} + \frac{6}{8} + \frac{5}{8} = \frac{15}{8} = 1\tfrac{7}{8}, \text{ sum required.}$$

Let each of these lines be divided into 8 parts; it will be found that in the first line at the cross, which is $\frac{1}{2}$ of it, there are $\frac{4}{8}$, in the second at the cross, which is $\frac{3}{4}$, there are $\frac{6}{8}$, which reduces these numbers to fractions of the same denomination and value.

Eleventh Question, as answered by J. W. P——

$\frac{2}{3}$ of a £ = 13*s.* 4*d.*, $\frac{3}{4}$ of a guinea = 15*s.* 9*d.*, $\frac{1}{6}$ of a crown = 10*d.*

13*s.* 4*d.* + 15*s.* 9*d.* + 10*d.* + $2\frac{1}{2}$*d.* = £1. 10*s.* $1\frac{1}{2}$*d.*, sum required.

Twelfth Question, as answered by J. W. P——

If we multiply 1 by itself or 1, the product will be 1; but if we multiply 1 by $\frac{1}{2}$ we shall have $\frac{1}{2}$ only as the product, for in 1 there are two halves, or $\frac{2}{2}$; if we multiply this by $\frac{1}{2}$ we will find it to be $\frac{2}{4}$, or $\frac{1}{2}$. Now, if a fraction multiply unity the product must be less, for unity multiplied by unity which is greater than a fraction will give unity only. And if a fraction be multiplied by a fraction it is evident that these cannot produce unity, $\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$. If we wish to bring a quarter into halves, it is plain we must divide it. Cut the quarter of an apple into two pieces that are equal, and as there are four quarters in an apple, 4 × 2 will equal 8, which will be the $\frac{1}{8}$ of the whole apple. As there is $\frac{1}{8}$ in the half of a quarter, there must consequently be $\frac{3}{8}$ in the three halves of a quarter.

Thirteenth and Fourteenth Questions, as answered by F. V. I——

$$\frac{1}{2} \div \frac{1}{4} = \frac{1}{2} \times \frac{4}{1} = \frac{4}{2} = 2.$$

The reason of this operation will be understood by considering that $\frac{1}{4}$ is only the $\frac{1}{4}$ part of unity, and consequently the quotient obtained by dividing by $\frac{1}{4}$ must be 4 times the quotient obtained by dividing by 1. I divide therefore by 1 and multiply by 4, which is the same thing as inverting the division according to the common rule given.

Fifteenth Question, as answered by F. V. I——

$$\frac{1}{8} \text{ of } \frac{3}{4} = \frac{3}{32} = \text{the part sold.}$$

$$\therefore \frac{3}{4} - \frac{3}{32} = \frac{24}{32} - \frac{3}{32} = \frac{21}{32}, \text{ the part of the ship remaining.}$$

Sixteenth Question, as answered by G. R——

$$\frac{3}{4} \text{ of } \frac{1}{4} = \frac{3}{16} = \text{part sold.}$$

$$\frac{610 \times 16}{3} = £3253.\ 6s.\ 8d. = \text{value of the ship.}$$

19. A can mow a field in 10 days, B in 12 days, and A, B, and C together in 4 days. In what time can C alone do it?

20. Define a decimal fraction.

21. Reduce $\frac{5}{8}$, $\frac{1}{7}$, and $\frac{2}{3}$ to decimals.

22. Show the principle of the rule for reducing vulgar fractions to decimals.

23. Reduce the decimals $\cdot 125$, $\cdot\dot{3}$ and $\cdot\dot{4}\dot{5}$, to equivalent vulgar fractions.

Seventeenth Question, as answered by G. R——

$$\begin{matrix} \text{yd.} & \text{yd.} & \text{£.} \\ \frac{3}{4} : & \frac{61\frac{1}{2}}{2} \;\; \frac{123}{2} & : : \frac{5}{8} \end{matrix}$$

$$\frac{\overset{41}{\cancel{123}}}{2} \times \frac{5}{\underset{2}{\cancel{8}}} \times \frac{\cancel{4}}{\cancel{3}} = \frac{205}{4} = £51.\ 5s.$$

Eighteenth Question, as answered by W. R——

A can do $\frac{1}{6}$, B $\frac{1}{8}$, and C $\frac{1}{10}$ of the work in 1 ay.

Then A, B, and C together can do $\frac{1}{6} + \frac{1}{8} + \frac{1}{10} = \frac{47}{120}$ of the work in 1 day.

$$\frac{47}{120} : 1 : : 1 \text{ day.}$$

$$\frac{1 \times 1 \times 120}{1 \times 1 \times 47} = \frac{120}{47} = 2\frac{26}{47} \text{ days.}$$

Nineteenth Question, as answered by W. R——

A can mow $\frac{1}{10}$, B $\frac{1}{12}$, and A, B, and C $\frac{1}{4}$ of the field in 1 day.

A, B, and C – A and B = C, therefore $\frac{1}{4} - \left(\frac{1}{10} + \frac{1}{12}\right) = \frac{1}{4} - \frac{11}{60} = \frac{4}{60} = \frac{1}{15} =$ the part of the work C can do in 1 day.

$$\frac{1}{15} : 1 : : 1 \text{ day.}$$

$$\frac{15 \times 1 \times 1}{1 \times 1 \times 1} = \frac{15}{1} = 15 \text{ days.}$$

Twentieth Question, as answered by W. E——

A decimal fraction is a fraction which has for its denominator 10, or any power of 10.

Twenty-first Question, as answered by W. E——

$$\frac{5}{8}, \frac{1}{7}, \text{ and } \frac{2}{3}$$

$$\frac{5 \cdot 000}{8} = \cdot 625 \quad \frac{1 \cdot 000000}{7} = \cdot\dot{1}4285\dot{7}$$

$$\text{And } \frac{2 \cdot 0}{3} = \cdot\dot{6}.$$

24. Reduce the mixed repeater $\cdot 3\dot{5}$ to an equivalent vulgar fraction, from the definition of repeating decimals, and also by the method of series.

25. Find the sum of $5\frac{1}{2}$, $6\frac{3}{4}$, and $7\frac{1}{8}$ by vulgar fractions and decimals.

Twenty-second Question, as answered by J. A. C——

If two fractions are of the same value, the same ratio exists between the denominator and numerator of the one and those of the other. Therefore, having the members of the one and one member of the other, we can easily, by proportion, find the other member, as in the first exercise in the last question we have given 5 and 8, members of the vulgar fraction, and the denominator of the decimal fraction (which is some power of 10, say $(10)^3 = 1000$) to find the numerator. We accordingly state thus

$$8 : 5 :: 1000 : 625 = \text{numerator of the fraction}$$

$$\frac{625}{1000} = \cdot 625.$$

Twenty-third Question, as answered by J. A. C——

$$\cdot 125 = \frac{125}{1000} = \frac{1}{8}; \ \dot{3} = \frac{3}{9} = \frac{1}{3}; \ \dot{4}\dot{5} = \frac{45}{99} = \frac{5}{11}.$$

Twenty-fourth Question, as answered by J. G——

By the first method.

$$\cdot 3\dot{5} = \frac{3}{10} + \frac{5}{9 \times 10} = \frac{3}{10} + \frac{5}{90} = \frac{27}{90} + \frac{5}{90} = \frac{32}{90} \div 2 = \frac{16}{45}.$$

By the method of series.

To find the value of $\cdot 3\dot{5}$ by series, we must separate the finite part from the repeating part, and having determined the value of the repeating part, we may afterwards add the finite part. The sum will be the value of the whole decimal.

$$\text{Thus,} \quad \cdot 3\dot{5} = \frac{3}{10} + \frac{5}{100} + \frac{5}{1000} + \frac{5}{10000} + \&c.$$

$$\text{Let} \quad s = \frac{5}{100} + \frac{5}{1000} + \frac{5}{10000} \ \&c.$$

$$\text{Dividing by 10,} \quad \frac{s}{10} = \frac{5}{1000} + \frac{5}{10000} \ \&c.$$

$$\therefore \ s - \frac{s}{10} = \frac{5}{100}$$

$$s\left(1 - \frac{1}{10}\right) = \frac{5}{100} \therefore s = \frac{5}{100} \div \frac{9}{10} = \frac{50}{900} = \frac{5}{90}.$$

$$\text{Then} \ \frac{3}{10} + \frac{5}{90} = \frac{27}{90} + \frac{5}{90} = \frac{32}{90} \div 2 = \frac{16}{45}, \text{ as before.}$$

Twenty-fifth Question, as answered by J. G——

$$5\tfrac{1}{2}, 6\tfrac{3}{4}, 7\tfrac{1}{8}.$$

$$5\tfrac{1}{2} = \frac{44}{8}; \ 6\tfrac{3}{4} = \frac{54}{8}; \ 7\tfrac{1}{8} = \frac{57}{8}$$

$$\frac{44}{8} + \frac{54}{8} + \frac{57}{8} = \frac{155}{8} = 19\tfrac{3}{8} = \text{the sum by vulgar fractions.}$$

$$5\tfrac{1}{2} = 5\cdot 5; \ 6\tfrac{3}{4} = 6\cdot 75; \ 7\tfrac{1}{8} = 7\cdot 125$$

$$5\cdot 5 + 6\cdot 75 + 7\cdot 125 = 19\cdot 375 = 19\tfrac{3}{8} = \text{the sum by decimals.}$$

26. Find the difference between £16·45 and £10·25.
27. Reduce 15*s.* 6¾*d.* to the decimal of a £.
28. What is the value of ·325 of a crown?
29. Multiply 5·25 by 3·15, and prove the result by vulgar fractions.
30. Divide 7·5 by ·005, and prove the result by vulgar fractions.
31. Raise 36 to the 4th power.

32. $\sqrt{137641}$, $\sqrt{.00004761}$, and $\sqrt{\frac{1296}{25}}$.

Twenty-sixth Question, as answered by W. W——

£16·45 − £10·125 = £6·325 = £6. 6*s.* 6*d.*

Twenty-seventh Question, as answered by W. W——

```
      4)3·00
     12)6·7500
   2,0)15·562500
       .778125.
```

Twenty-eighth Question, as answered by W. M. B——

```
 ·325
    5
1·625 = 1s. 7½d.
   12
7·500
    4
2·000
```

Twenty-ninth Question, as answered by W. M. B——

$$5{\cdot}25 \times 3{\cdot}15 = 16{\cdot}5375$$

Proof by fractions, $5{\cdot}25 = 5\frac{1}{4} = \frac{21}{4}$, and $3{\cdot}15 = 3\frac{3}{20} = \frac{63}{20}$

$$\frac{21}{4} \times \frac{63}{20} = \frac{1323}{80} = 16\frac{43}{80} = 16{\cdot}5375.$$

Thirtieth Question, as answered by W. M. B——

$$\frac{7{\cdot}5}{{\cdot}005} = 1500$$

Proof by vulgar fractions, $7{\cdot}5 = 7\frac{1}{2} = \frac{15}{2}$, and ${\cdot}005 = \frac{5}{1000} = \frac{1}{200}$

$$\frac{15}{2} \div \frac{1}{200} = \frac{15}{2} \times \frac{200}{1} = \frac{3000}{2} = 1500.$$

Thirty-first Question, as answered by F. F——

$$(36)^4 = 36 \times 36 \times 36 \times 36 = 1671216.$$

Thirty-second Question, as answered by F. F——

```
   13'76'41(371 = square root.
    9
 67)476
    469
741)··741
      741
```

```
·00'00'47'61(·0069
         36
     129)1161
         1161
         ····
```

$$\frac{\sqrt{1296}}{\sqrt{25}} = \frac{36}{5} = 7\frac{1}{5}.$$

33. Write down the algebraic formula from which the rule for the extraction of the square root arises, and by it find the square root of 3136.

34. I find that a ladder 60 feet in length may be so placed in a street as to reach a window 48 feet from the ground, and by turning the ladder without moving its foot it will reach another window on the opposite side 36 feet from the ground. What is the breadth of the street?

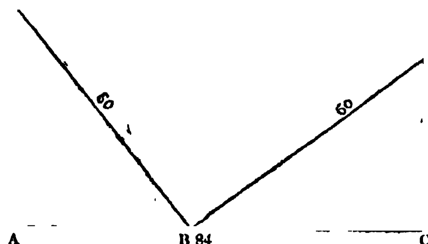
Thirty-third Question, as answered by J. A. C——

$$(a+b)^2 = a^2 + 2ab + b^2.$$

The number 3136 contains four places, or two periods, consequently its root wil contain two places, of which let us call the tens a and the units b, as above. According to the formula the number 3136 contains the square of the tens, the square of the units, and twice the products of the tens by the units of its root. Now the tens a will be the root of the greatest square contained in the first period. The square of this being subtracted, the remainder contains twice the tens, multiplied by the units, plus the square of the units. The units therefore may be found by dividing the remainder by $2a$. The units figure b, being added to $2a$ for a divisor, and multiplied by b, will give $2ab + b^2$, the remaining part of the square number after a^2 is subtracted.

$$\begin{array}{rl} \text{Thus} & 3136(50+6=56 \\ a^2 = & 2500 \\ 2a = 100 & \overline{636} \\ b(100+b) = & 636 \end{array}$$

Thirty-fourth Question, as answered by J. B-



$$60^2 - 48^2 = 3600 - 2304 = 1296 = AB^2$$

$$\sqrt{1296} = 36 = AB$$

$$60^2 - 36^2 = 3600 - 1296 = 2304 = BC^2$$

$$\sqrt{2304} = 48 = BC$$

Then AB + BC = 36 + 48 = 84 ft. = length AC, or breadth of the street.

Thirty-fifth Question, as answered by W. R——

$$(a+b)^3 = a^3 + 3a^2b + 3ab^2 + b^3 = a^3 + b(3a^2 + 3ab + b^2)$$

$$\begin{array}{rcl} & & 3375(10+5=15 \\ a^3 & = & 1000 \\ & & \overline{2375} \\ 3a^2 = 3 \times 10^2 & = & 300 \\ 3ab = 3 \times 10 \times 5 & = & 150 \\ b^2 = 5^2 & = & 25 \\ (3a^2 + 3ab + b^2)\,b & = & \overline{475} \times 5 = 2375 \end{array}$$

35. Write the algebraic formula for the extraction of the cube root, and apply it to find the cube root of 3375.

36. $\sqrt[3]{39651821}$; $\sqrt[3]{\cdot 000004096}$; $\sqrt{\frac{1728}{125}}$.

37. How could you find the 4th, 6th, 8th, and 9th roots without using algebraic formulæ?

38. $\sqrt[4]{279841}$.

39. How much sterling money is equal to 4625.45 American dollars, exchange 464?

Thirty-sixth Question, as answered by W. M. B——

$$39651821(341 = \text{the cube root.}$$

$$3^3 = 27$$

$$3^2 \times 300 = 2700 \qquad 12651$$
$$3 \times 4 \times 30 = 360$$
$$4^2 = 16$$
$$3076 \times 4 = 12304$$

$$34^2 \times 300 = 346800 \qquad 347821$$
$$34 \times 1 \times 30 = 1020$$
$$1^2 = 1$$
$$347821 \times 1 = 347821$$

$$\cdot 000004096(\cdot 016 = \text{cube root.}$$

$$1^3 = 1$$
$$3096$$

$$1^2 \times 300 = 300$$
$$1 \times 6 \times 30 = 180$$
$$6^2 = 36$$
$$516 \times 6 = 3096$$

$$\frac{\sqrt[3]{1728}}{\sqrt[3]{125}} = \frac{12}{5} = 2\tfrac{2}{5}.$$

Thirty-seventh Question, as answered by W. F——

For the extraction of the 4th root take the square root of the square root.
For that of the 6th root take the square root of the cube root.
For that of the 8th root take the square root of the 4th root.
For that of the 9th root take the cube root of the cube root.

Thirty-eighth Question, as answered by G. R——

$\sqrt{279841} = 529$ and the $\sqrt{529} = 23 =$ the 4th root.

Thirty-ninth Question, as answered by W. R——

dollars.	dollars.	£.
464 :	4625·45 : :	100

$$\frac{4625\cdot 45 \times 100}{464} = \frac{462545}{464} = £996.\ 17s.\ 3\tfrac{1}{4}d.\tfrac{19}{29}.$$

ARITHMETICAL QUESTIONS *proposed to the Second Class.*

MR. B. HORNE.

1. How often would a coach-wheel, 12 feet in circumference, revolve between London and Edinburgh, the distance being 380 miles?

2. In how many years could a person count eight hundred millions of sovereigns, at the rate of 100 per minute, reckoning 10 hours to a day's work, and 313 working days to a year?

3. Find the sum of 40 guineas, 30 moidores, 617 crowns, 23 half-crowns, 93 fourpenny pieces, and 66 farthings, in pounds.

4. A merchant has in cash £450. 3*s*. 4*d*.; goods to the value of £3256. 7*s*. 6¼*d*.; debts due to him £2341. 16*s*. 7¼*d*. At the same time he owes one person £650. 4*s*. 2¾*d*., to another £328. 9*s*. 4*d*., and to a third £156. 17*s*. 2*d*. How much will he be worth after paying his debts?

ARITHMETIC.—SECOND DIVISION.

First Question, as answered by J. S——

```
      380
     1760
   ------
   668800
        3
   ------
12)2006400
   ------
   167200
```

Second Question, as answered by C. P——

```
 1,00)800,000,000
      -----------
  6,0)8000000
      -------
   10)133333  20
      ------------
  313)13333    3
      ------------
        42   187
```

	years.	days.	hours.	min.
Answer,	42	187	3	20

Third Question, as answered by H. C——

		£.	s.	d.
40 guineas	=	42	0	0
30 moidores	=	40	10	0
617 crowns	=	154	5	0
23 half-crowns	=	2	17	6
93 fourpences	=	1	11	0
66 farthings	=	0	1	4½
		£241	4	10½

Fourth Question, as answered by J. S——

£.	s.	d.
450	3	4
3256	7	6¼
2341	16	7¼
£6048	7	5½

£.	s.	d.
650	4	2¾
328	9	4
156	17	2
£1135	10	8¾

£.	s.	d.	
6048	7	5½	= effects.
1135	10	8¾	= debts.
£4912	16	8¾	= balance.

5. Find the value of $421\frac{4}{5}$ cwt. of sugar, at £3. 2*s*. 6*d*. per cwt., by as many methods as you can.

6. Find the value of 51 yards of cloth, at the rate of £2. 2*s*. 10*d*. for 8 yards, without using the rule of Proportion.

Fifth Question, as answered by H. W——

```
 £.  s.  d.
 3   2   6
         10 × 10 × 4 + 20 + 1 + 4/5 = 421 4/5
 ---------
 31  5   0
         10
 ---------
 312 10  0
          4
 ---------
 1250  0  0 = value of 400
   62 10  0 =    ,,     20
    3  2  6 =    ,,      1
    2 10  0 =    ,,     4/5
 ------------          ------
 1318  2  6 =         421 4/5
```

```
 2·6 | 1/8 | 421
     |     |   3
     |     | ----
     |     | 1263
     |     |   52 12  6
 Value of 4/5 =  2 10  0
             ------------
             £1318  2  6
```

```
 1 : 421 4/5 : : 3  2  6
                20
                --
                62
                 12
                ---
                750
               421 4/5
          ---------
        12)316350
      2,0)2636,2  6
          ---------
          1318  2  6
```

$421\frac{4}{5} = \frac{2109}{5}$, and £3. 2*s*. 6*d*. $= \frac{25}{8}$

$\frac{2109}{5} \times \frac{25}{8} = \frac{52725}{40}$ *d*. $=$ £1318. 2*s*. 6*d*.

$421\frac{4}{5} = 421{\cdot}8$, and £3. 2*s*. 6*d*. $=$ £3·125.

```
      3·125
      421·8
     ------
      25000
      3125
     6250
   12500
 ----------
 £1318,1250
         20
       ----
    s. 2,5
         12
       ----
    d. 6,0
```

Ans. £1318. 2*s*. 6*d*.

Sixth Question, as answered by W. H——

```
    £.  s.  d.
  8)2   2  10
  ------------
        5   4 1/4 = value of 1 yard.
           10 × 5 + 1 = 51
  ------------
    2  13   6 1/2
            5
  ------------
   13   7   8 1/2 = value of 50
        5   4 1/4 = value of  1
  ---------------
 £13  13   0 3/4 = value of 51
```

7. "If 4 numbers are proportional, the product of the extremes is equal to the product of the means." Illustrate this by an example, and from it deduce "The Rule of Three."

8. If the wages of 10 men for 8 days amount to £10. 16*s.* 8*d.*, what will be the wages of 34 men for 4 days, at the same rate? Work this example without using the rule called Compound Proportion.

9. Apportion £360 on 3 parishes whose average poor rates are £1500, £1000, and £900 respectively.

10. Find the amount at Simple and Compound Interest of £640 for 4 years, at 5 per cent. Work this example by both methods.

Seventh Question, as answered by W. M. L——

4 : 12 : : 3 : 9

4 bears the same proportion to 12 that 3 does to 9, and therefore if you multiply the two means 12 and 3 together and divide by the one extreme 4, that will give you the other extreme, because the one extreme must be contained in the product of the means as many times as multiplied into the other extreme will produce a product equal to the product of the means.

Eighth Question, as answered by W. G——

	£.	s.	d.	
10)	10	16	8	= wages of 10 men for 8 days.
8)	1	1	8	= wages of 1 man for 8 days.
		2	$8\frac{1}{2}$	= wages of 1 man for 1 day.
			34	
	4	12	1	= wages of 34 men for 1 day.
			4	
	£18	8	4	= wages of 34 men for 4 days.

Ninth Question, as answered by W. M. L——

£.
100 { 1500 = 15
  1000 = 10
  900 = 9
  34

					£.	s.	d.
34 :	15 : :	360 :			158	16	$5\frac{1}{2}\frac{20}{34}$
34 :	10 : :	360 :			105	17	$7\frac{3}{4}\frac{2}{34}$
34 :	9 : :	360 :			95	5	$10\frac{1}{2}\frac{12}{34}$
					£360	0	0

Tenth Question, as answered by G. K—

£.
640

32,00 = interest for 1 year.
4

128· = interest for 4 years.
640

£768 = amount at simple interest.

11. Find the present worth of £623. 3*s*., due 9 months hence, reckoning interest at 4 per cent.

12. Define a fraction.

13. Reduce $16\frac{1}{8}$ to the form of a fraction.

14. Simplify $\frac{3}{4}$ of $\frac{5}{9}$ of $\frac{8}{15}$ of 2.

	£.			
	640			
			5	
	32,00			= 1st year's interest.
	640			
	672		0	= 2nd year's principal.
			5	
100)	33,60		0	
	33	12	0	= 2nd year's interest.
	672	0	0	
	705	12	0	= 3rd year's principal.
			5	
100)	35,28	0	0	
	35	5	7	= 3rd year's interest.
	705	12	0	
	740	17	7	= 4th year's principal.
			5	
100)	3740	7	11	
	37	0	$10\frac{1}{2}$	= 4th year's interest.
	740	17	7	
	£777	18	$5\frac{1}{2}$	= amount at compound interest.

Eleventh Question, as answered by C. C–

12 : 9 : : 4
4
12)36
£3 = interest on £100 for 9 months.

£100 + 3 = £103 = amount for 9 months.
£103 : £100 : : £623. 3*s*.
20 20

2060 12463
100

2060)1246300
£605 = the present worth.

Twelfth Question, as answered by S. S——

A fraction is a part or parts of any thing.

Thirteenth Question, as answered by S. S——

$$16\tfrac{1}{8} = \frac{129}{8}.$$

Fourteenth Question, as answered by S. S——

$$\tfrac{3}{4} \text{ of } \tfrac{5}{9} \text{ of } \tfrac{8}{15} \text{ of } 2 = \frac{\overset{1}{\cancel{3}} \times \overset{1}{\cancel{5}} \times \overset{2}{\cancel{8}} \times 2}{\underset{1}{\cancel{4}} \times \underset{3}{\cancel{9}} \times \underset{3}{\cancel{15}} \times 1} = \frac{4}{9}.$$

15. Simplify $\frac{7}{10}$ of $\frac{2}{3}$ of $\frac{3}{4}$ of $\frac{13\frac{1}{2}}{7}$.

16. Reduce $\frac{1}{2}$, $\frac{3}{4}$, and $\frac{5}{8}$ to a common denominator by using lines, and find the sum of these fractions.

17. Find the sum of £$\frac{2}{3}$, $\frac{3}{4}$ guinea, $\frac{1}{6}$ of a crown, and $2\frac{1}{2}d$.

18. Reduce the mixed repeater $\cdot 3\dot{5}$ to an equivalent vulgar fraction.

19. Find the sum of $5\frac{1}{2}$, $6\frac{3}{4}$, and $7\frac{1}{8}$, by vulgar fractions and decimals.

20. Find the difference between £16·45 and £10·125.

Fifteenth Question, as answered by T. O——

$$\frac{7}{10} \text{ of } \frac{2}{3} \text{ of } \frac{3}{4} \text{ of } \frac{13\frac{1}{2}}{7} = \frac{7 \times 2 \times 3 \times 13\frac{1}{2}}{10 \times 3 \times 4 \times 7} = \frac{567}{840} \div 21 = \frac{27}{40}.$$

Sixteenth Question, as answered T. O—

```
½ ¾, ⅝
 .    .  —|——|——×——|——|——|——|  thus ½ = 4/8
|——|——|——|——|——|——×——|——|       thus ¾ = 6/8
|——|——|——|——|——×——|——|——|       thus ⅝ = 5/8
```

Seventeenth Question, as answered by T. O——

		s.	d.
$\frac{2}{3}$ of a £	=	13	4
$\frac{3}{4}$ of a guinea	=	15	9
$\frac{1}{6}$ of a crown	=	0	10
d. $2\frac{1}{2}$	=	0	$2\frac{1}{2}$
	£ 1	10	$1\frac{1}{2}$

Eighteenth Question, as answered by C. C——

$$\begin{array}{l} \cdot 35 \\ \underline{\ \ 3} \\ \frac{32}{90} = \frac{16}{45} \end{array} \quad \text{or } \frac{3}{10} + \frac{5}{90} = \frac{27}{90} + \frac{5}{90} = \frac{32}{90} = \frac{16}{45}$$

Nineteenth Question, as answered by R. B——

$5\frac{1}{2}$, $6\frac{3}{4}$, $7\frac{1}{8}$

$5\frac{1}{2} = 5\frac{4}{8}$		$5\frac{1}{2} = 5\cdot 5$
$6\frac{3}{4} = 6\frac{6}{8}$		$6\frac{3}{4} = 6\cdot 75$
$7\frac{1}{8} = 7\frac{1}{8}$		$7\frac{1}{8} = 7\cdot 125$
$19\frac{3}{8}$	by vulgar fractions	$19\cdot 375 =$

$$19\,\frac{\cdot 375}{1000} = 19\tfrac{3}{8} \text{ by decimals.}$$

Twentieth Question, as answered by W. A——

$$\begin{array}{r} £. \\ 16\cdot 45 \\ \underline{10\cdot 125} \\ 6\cdot 325 \end{array} = £6.\ 6s.\ 6d.$$

21. Reduce 15*s.* $6\frac{3}{4}$*d.* to the decimal of a £.
22. What is the value of ·325 of a crown?
23. Multiply 5·25 by 3·15, and prove the results by vulgar fractions.
24. Divide 7·5 by ·005, and prove the result by vulgar fractions.
25. Raise 36 to the 4th power.

26. $\sqrt{137641}$; $\sqrt{\cdot00004761}$; and $\sqrt{\frac{1296}{25}}$.

Twenty-first Question, as answered by M. H——

```
       15s. 6¾d.
    4) 3·00
   12) 6·7500
   20)15·562500
       ·778125 = decimal of £1.
```

Twenty-second Question, as answered by M. H——

·325 of a crown = 1*s.* $7\frac{1}{2}$*d.*

```
    5
1·625
   12
7·500
    4
2,000
```

Twenty-third Question, as answered by M. H——

```
   5·25
   3·15
   2625
   525
 1575
 16·5375
```

Proof by vulgar fractions.

$5\cdot25 = 5\frac{1}{4} = \frac{21}{4}$

$3\cdot15 = 3\frac{3}{20} = \frac{63}{20}$

$\frac{21 \times 63}{4 \times 20} = \frac{1323}{80} = 16\cdot5375.$

Twenty-fourth Question, as answered by W. A——

```
·005)7·500(1500
     7500
```

Proof by fractions.

$7\cdot5 = 7\frac{1}{2}$ 15

·005 = 1000

$\left(\frac{15}{2} \div \frac{5}{1000} = \frac{15}{2} \times \frac{1000}{5}\right) = \frac{15000}{10} = 1500.$

Twenty-fifth Question, as answered by H. W——

$36^2 = 36 \times 36 = 1296$, and $1296^2 = 1296 \times 1296 = 1679616$ = the 4th power.

Twenty-sixth Question, as answered by A. D——

```
   137641(371            ·00004761(·0069
   9                             36
67)476                      129)1161
   469                          1161
741)··741                        ···
      741
      ···
```

$\frac{\sqrt{1296}}{\sqrt{25}}$ 36

EXAMINATION PAPERS.—ARITHMETIC.

First Division.

Highest value of the Questions 180.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission.														
		P——, J. W.	R——, W., Aged 16, Admitted 27 Jan. 1840.	G——, J., Aged 15, Admitted 27 Jan. 1840.	E——, W., Aged 14, Admitted 27 Jan. 1840.	C——, J. A.	R——, George, Aged 16, Admitted 1 August, 1840.	B——, W. M., Aged 17, Admitted 12 Feb. 1840.	F——, F. S., Aged 19, Admitted 25 June, 1840.	H——, W., Aged 19, Admitted 27 Jan. 1840.	B——, J., Aged 20, Admitted 30 July, 1840.	A——, S, Aged 19, Admitted 15 May, 1840.	W——, W., Aged 14, Admitted 6 Feb. 1840.	I——, F. V.	T——, J., Aged 13, Admitted 27 Jan. 1840.	W——, W., Aged 25, Admitted 30 June, 1840.
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Tot.	148	154	154	147	139	134	115	114	98	91	89	80	83	65	63	33

EXAMINATION PAPERS.—ARITHMETIC.

Second Division.

Highest value of the Questions 100.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission.															
		C——, C., Aged 13, Admitted 27 Jan. 1840.	L——, W. M., Aged 17, Admitted 7 Feb. 1840.	H——, M., Aged 15, Admitted 7 April, 1840.	W——, H. W., Aged 14, Admitted 27 Jan. 1840.	A——, W., Aged 16, Admitted 21 March, 1840.	B——, R., Aged 15, Admitted 21 Feb. 1840.	D——, A., Aged 17, Admitted 28 Oct. 1840.	O——, T., Aged 18, Admitted 25 June, 1840.	D——, J., Aged 14, Admitted 26 June, 1840.	G——, W., Aged 22, Admitted 22 Nov. 1840.	P——, C., Aged 13, Admitted 21 Feb. 1840.	K——, George, Aged 17, Admitted 16 June. 1840.	S——, S., Aged 16, Admitted 5 August, 1840	S——, J., Aged 25, Admitted 20 April. 1840.	C——, H., Aged 15, Admitted 1 Feb. 1840.	H——, W.
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8	5	6	..	5	..	6	5	5	5	..	5	4	..	..	..	..	5
9	4	4	5	4	4	4	4	4	4	4	4	..	5	..	..	4	..
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11	4	4	4	5	5	4	5	5	..	3	5	..	..	..	..	3	..
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14	3	3	3	..	3	3	3	3	..	3	3	3	3	3	..	..	..
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16	3	4	4	4	4	4	..	3	3	3	..	..	..	..	..	..	..
17	3	3	3	2	3	3	3	..	3	3	3	3	..	..	..	..	..
18	..	4	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..
19	4	4	4	3	..	4	4	..	4	4	..	2	..	..	..	..	..
20	3	3	3	2	3	2	3	..	3	3	..	2	..	3	..	..	..
21	3	..	3	3	3	..	3	..	..	..	..	..	..	..	3	..	..
22	3	3	3	4	3	..	2	..	..	..	..	..	..	..	3	..	..
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24	5	5	5	5	5	5	..	..	..	..	..	..	..	..	..	..	..
25	3	3	3	3	3	3	2	3	3	3	..	..	..	3	..	..	..
26	6	6	6	6	6	6	5	6	..	6	..	2	..	4	5	..	..
Tot.	80	93	91	96	83	83	71	66	59	60	56	49	42	41	39	40	28

MENSURATION *and* ALGEBRAIC PROBLEMS *proposed to the First Class.*

MR. THOMAS TATE.

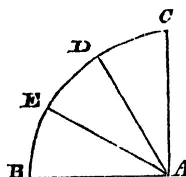
1. Find the area of a sector, whose radius is 2·5 yards, and arc 23° 30′.
2. Trisect a right angle.
3. The area of a circle is 7·0686 feet, what is its diameter?
4. What is the weight of the water contained in a pipe whose diameter is 2½ inches, and length 50 feet?
5. In round numbers, the diameter of the earth is 8000 miles. Required the length of a degree upon the equator?

SOLUTIONS TO MENSURATION AND ALGEBRAICAL PROBLEMS PROPOSED TO THE FIRST CLASS.

First Question, as answered by S. A——

Radius × 2 = diameter:
Then 2·5 × 2 = 5.
$5^2 \times \cdot 7854 = 12\cdot 6350$ area of circle.
360° ÷ 22° 30′ = 16 number of times contained in circle.
Then 19.6350 ÷ 16 = 1·2271875 = area of section.

Second Question, as answered by J. A. C——.



Let A C B be a right angle; it is required to trisect it. From the angular point C describe the arc A B. From B, with the distance B C, describe an arc cutting A B in *n*, and from A, with the distance A C, describe another arc cutting A B in *m*: the angle A C B is trisected in *n* and *m*. For A C and B C are each a radius of the circle, of which A B is an arc containing 90°. Now the radius of a circle is known to be equal to the chord of an arc of 60°, or one-sixth of the circle; consequently A *m* and B *n* are each ⅙th of a circle or 60°; and the remainders, B *m* and A *n*, are each 30°, as well as *m n*. Thus the angle is trisected in the points *m* and *n*, which was to be done.

Third Question, as answered by W. H——

7·0686 = area of the circle.
7·0686 ÷ ·7854 = 9 = square of the diameter;
$\therefore \sqrt{9} = 3$ = diameter.

Fourth Question, as answered by W. H——

2·5 = diameter of pipe.
in.
$\therefore 2\cdot 5^2 \times \cdot 7854 = 4\cdot 9086$ = area of the tube,
$\therefore \frac{4\cdot 9086}{144} = \cdot 0340875$ = area of same in feet;
∴ ·0340875 × 50 = 1·704375 = solidity of the water,
∴ 1·704375 × 1000 = 1704·375, or = 106·5231 lbs. = wt. required.

Fifth Question, as answered by F. S. F——

Miles
8000 × 3·1416 = 25123·8 miles = circumference of the earth.
Then 25123·8 miles ÷ 360° = 69·81 miles, or 1 degree.

6. How many 3-inch cubes can be cut out of a 12-inch cube?

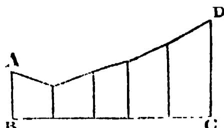
7. What is the weight of a rectangular block of stone, whose length is 5 feet, breadth 2 feet 6 inches, thickness 4 feet, and S. G. 2500?

8. Find the radius of the circle circumscribing a square, whose side is 5·02.

9. The width of a roof is 20 feet, and the length of the rafter 12 feet. What is the perpendicular height of the roof?

10. Required the area of the ring of which the radii of the concentric circles are 10 and 5.

11. Find the area of the space A B C D, bounded by a curve on the one side. The perpendiculars at the extremities 10 and 20; and the other perpendiculars 8, 10, 12, and 16, and the length of the base 40. The perpendiculars are supposed to be taken at equal distances from each other.

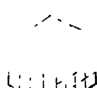


12. The sides of a regular parallelopiped are 9, 8, and 10 respectively. Required the diagonal of the solid.

13. The diameter of a circle is 10. What is the area of the inscribed square?

Sixth Question, as answered by F. V. I——

Suppose the twelve-inch cube to be the annexed figure.



If I divide it into 4 equal slices, each slice will be 3 inches in depth, 12 inches in length, and 12 inches in breadth, or 16 cubes, which multiplied by 4 for the number of cubes in all = 64. The figure will show this operation better than any language.

Seventh Question, as answered by J. T——

5 ft. × $2\frac{1}{2}$ ft. × 4 ft. = the solid contents of the block, or 50 cubic feet.
∴ 50 × 2500 = 125000 or = 7812·5 lbs. = weight required.

Eighth Question, as answered by S. A——

Let x = the diameter.

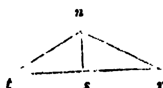
$\therefore x^2 = 5{\cdot}02^2 + 5{\cdot}02^2;$

$\therefore x^2 = 50{\cdot}4008;$

$\therefore x = 7{\cdot}09,$

$\therefore \frac{1}{2}x = \frac{7{\cdot}09}{2} = 3{\cdot}545$ = radius.

Ninth Question, as answered by J. A. C——



tr = the width = 20 ft.; $\therefore rs = 10$.
nr = 12 ft.; $ns = \sqrt{nr^2 - rs^2} =$
$\sqrt{144 - 100} = \sqrt{44} = 6{\cdot}633$ ft. result.

Tenth Question, as answered by W. B——

Diameter = twice the radius.
Then 10 × 2 = 20 = diam. of the larger;
And 5 × 2 = 10 = diam. of the less.
Then 20 − 10 = 10 = dif. of the rings;
20 + 10 = 30 = sum of ditto.
Then 30 + 10 × ·7854 = 235·62 = area of req. ring.

14. What is the area of a regular dodecagon, the radius of the circumscribing circle being 20?

15. Required the area of a triangle, whose two sides are 160 and 180 links respectively, and the included angle 31° 45′.

Solve the following equations:—

(16th.) $\frac{(4+x^1)}{16-x^2}=\frac{5}{3}$. (17th.) $\frac{1}{x^2}+\frac{1}{x}=\frac{2}{x}$. (18th.) $x^4-2x^2=8$.

Eleventh Question, as answered by F. V. I——

Take the mean height of each compartment, and multiply it by that part of the base which forms the base of the compartment.

or $8 \times \left\{\frac{10+8}{2}+\frac{8+10}{2}+\frac{10+12}{2}+\frac{12+16}{2}+\frac{16+20}{2}\right\} = 488$ ft. = area of the space.

Twelfth Question, answered by G. R——

By the 47th, bk. i. of Euclid, the sum of the squares of the three sides are equal to the diagonal of the parallelopiped.

Let x = the diagonal.

$\therefore 9^2 + 8^2 + 10^2 = x^2;$

$\therefore 81 + 64 + 100 = x^2;$

$\therefore 245 = x^2;$

$\therefore 15{\cdot}56 = x.$

Thirteenth Question, as answered by J. T——

The diameter of a circle is equal to the diagonal of its inscribed square.

Then 10 = diagonal of the square.

$\therefore 10^2$ or $100 = CD^2 + BD^2;$

Then $100 \div 2 = CD^2$, or the area of the square = 50.

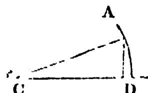
Fourteenth Question, as answered by W. M. W——

$$\text{Sine } C = \frac{AD}{AC}.$$

Sine C = sin. 30° = ·5;

But A C = 20.

$\therefore$ A D = 10.



$\therefore$ perpend. on the rad. = sine, for 30° × 20 = A D or 10

$\therefore$ Area required = 10 × 10 × 12 = 1200.

Or generally;

$$\text{Area of a dodecagon} = \left(\frac{\text{Radius}}{2}\right)^2 \times 12 = 3\ \text{Rad.}^2$$

Fifteenth Question, as answered by W. B——

Let C A and C D be the given sides; and A B a perpendicular upon C D, then

$$\text{Sine } C = \frac{AB}{AC};$$

$\therefore$ Sine C × A C = A B.

·526214 × 180 = 94·71 = A B;

$\therefore$ 94·71 × 80 = 7576·8 links = area of triangle.

	Po.	yds.	ft.	
Then 7576·8 links ÷ 100,000 =	12	3	6	req. area.

(19th.) $x^2 + 4x = 21.$ (20th.) $\left.\begin{array}{l}(x+2y) + \sqrt{x+2y} = 12 \\ xy \quad = \end{array}\right\}$

(21st.) $\left.\begin{array}{l}x + y = 3 \\ x^3 + y^3 = 9\end{array}\right\}$ (22nd.) $\left.\begin{array}{l}x^2 - 2y^2 = 2 \\ 3x^2 - xy = 10\end{array}\right\}$

Sixteenth Question, as answered by G. R——

By two methods.

(1st) $\frac{(4+x^1)^2}{16 - x^2} = \frac{5}{3};$

$\therefore 3(4 + x^1)^2 = 80 - 5x^2,$

$\therefore 3\{16 + 8x + x^2\} = 80 - 5x^2;$

$\therefore 48 + 24x + 3x^2 = 80 - 5x^2;$

$\therefore 3x^2 + 5x^2 + 24x = 80 - 48;$

$\therefore 8x^2 + 24x = 32;$

$\therefore x^2 + 3x = 4;$

$\therefore x^2 + 3x + \frac{9}{4} = 4 + \frac{9}{4} = \frac{25}{4};$

$\therefore x + \frac{3}{2} = \pm \frac{5}{2};$

$\therefore x = -\frac{3}{2} \pm \frac{5}{2} = \frac{2}{2}$ or 1; or $-\frac{8}{2} = -4.$

(2d.) The product of the sum and difference of any two numbers is equal to the difference of their squares. Hence dividing both numerator and denominator by $4 + x$ the equation will become

$$\frac{4+x}{4-x} = \frac{5}{3};$$

Then $12 + 3x = 20 - 5x;$

$\therefore 8x = 20 - 12 = 8,$

$\therefore x = 1.$

Seventeenth Question, as answered by J. G——

$$\frac{1}{x^2} + \frac{1}{x} = \frac{2}{x};$$

$\therefore 1 + x = 2x,$

$\therefore 1 = 2x - x,$

$\therefore 1 = x.$

Eighteenth Question, as answered by F. S. F——

$x^4 - 2x^2 = 8.$

$\therefore x^4 - 2x^2 + 1 = 8 + 1 = 9;$

$\therefore x^2 - 1 = 3,$

$\therefore x^2 = 3 + 1 = 4,$

$\therefore x = 2.$

Nineteenth Question, as answered by W. W——

$x^2 + 4x = 21;$

$\therefore x^2 + 4x + 4 = 21 + 4 = 25,$

$\therefore x + 2 = \pm 5,$

$\therefore x = \pm 5 - 2 = 3,$ or $-7.$

Twentieth Question, as answered by W. R——

$$\left.\begin{array}{l}(x + 2y) + (x + 2y)^{\frac{1}{2}} = 12 \\ xy = 4\end{array}\right\} \therefore y = \frac{4}{x};$$

Let $z = x + 2y,$

(23rd.) What is the sum of the series $1 + 2 + 3 +$ to n terms?

$$\text{Then } z + z^{\frac{1}{2}} = 12;$$
$$\therefore z + z^{\frac{1}{2}} + \tfrac{1}{4} = 12 + \tfrac{1}{4} = \frac{49}{4},$$
$$\therefore z^{\frac{1}{2}} + \tfrac{1}{2} = \pm \frac{7}{2},$$
$$\therefore z\tfrac{1}{2} = -\tfrac{1}{2} \pm \frac{7}{2} = \frac{6}{2} = 3,$$
$$\therefore z = 9.$$
$$\therefore x + 2y = 9,$$
$$\text{by sub. val. of } y \therefore x + \frac{8}{x} = 9,$$
$$\therefore x^2 + 8 - 9x,$$
$$\therefore x^2 - 9x = -8,$$
$$\therefore x^2 - 9x + \frac{81}{4} = -8 + \frac{81}{4} = \frac{49}{4},$$
$$\therefore x - \frac{9}{2} = \pm \frac{7}{2},$$
$$\therefore x = \frac{9}{2} \pm \frac{7}{2} = 8 \text{ or } 1.$$
$$\text{Then } 8 + 2y = 9,$$
$$\therefore 2y = 9 - 8 = 1,$$
$$\therefore y = \tfrac{1}{2}.$$

Or by taking 1, as the value of x,

$$\text{Then } 1 + 2y = 9,$$
$$\therefore 2y = 8,$$
$$\therefore y = 4.$$

Twenty-first Question, as answered by W. E——

$$\left.\begin{array}{l} x + y = 3 \\ x^3 + y^3 = 9 \end{array}\right\} \quad \begin{array}{r} \therefore x^2 - xy + y^2 = 3, \\ \therefore x^2 + 2xy + y^2 = 9; \\ \hline 3xy = 6, \\ \therefore xy = 2. \end{array}$$

$$\begin{array}{l} x^2 - xy + y^2 = 3, \\ \quad\; xy \qquad\; = 2; \\ \hline x^2 - 2xy + y^2 = 1; \\ \therefore x - y = 1, \\ \therefore x + y = 3, \\ \hline \therefore 2x = 4; \\ \therefore x = 2, \\ \therefore 2y = 2, \\ \therefore y = 1. \end{array}$$

Twenty-second Question, as answered by J. W. P——

$$\left.\begin{array}{r} x^2 - 2y^2 = 2 \\ 3\,x^2 - xy = 10 \end{array}\right\} \quad \therefore 10x^2 - 20y^2 = 6x^2 - 2xy.$$

$$\text{Let } x = vy;$$
$$\therefore 10v^2y^2 - 20y^2 = 6v^2y^2 - 2vy^2;$$
$$\text{Divide by } y^2. \quad \text{Then } 10v^2 - 20 = 6v^2 - 2v,$$
$$\therefore 4v^2 + 2v = 20,$$
$$\therefore v^2 + \tfrac{1}{2}v = 5,$$

(24th.) What is the sum of the infinite series $\frac{1}{2} + \frac{1}{16} + \frac{1}{128}$, &c.

(25th.) Find the sum of the series $\frac{2}{7 \cdot 9} + \frac{2}{9 \cdot 11} + \frac{2}{11 \cdot 13} +$ ad infin.

$$\therefore \quad v^2 + \frac{1}{2} v + \frac{1}{16} = 5 + \frac{1}{16} = \frac{81}{16},$$

$$\therefore \quad v + \frac{1}{4} = \pm \frac{9}{4},$$

$$\therefore \; v = -\frac{1}{4} \pm \frac{9}{4} = 2, \text{ or } -\frac{5}{2}.$$

By substituting the positive value of v, we have $v y = 2 y$.

But $x = v y \; \therefore \; x = 2 y$.

By sub. new val of x. $4 y^2 - 2 y^2 = 2$;

$$\therefore \; 2 y^2 = 2,$$

$$\therefore \; y^2 = 1,$$

$$\therefore \; y = 1.$$

But $x = 2y$, $\therefore \; x = 2$.

The other values of x and y may be found by substituting the minus value of v, the above equation.

Twenty-third Question, as answered by W. R——

$$1 + 2 + 3 + \text{\&c. to } n \text{ terms.}$$

$$S = (2 a + (n - 1) d) \frac{n}{2};$$

$$\therefore S = (2 + (n - 1) 1) \frac{n}{2} = \overline{n + 1} \times \frac{n}{2} = \frac{n^2 + n}{2};$$

$$S = \frac{n^2 + n}{\;}.$$

Twenty-fourth Question, as answered by J. G——

$$S = \frac{1}{2} + \frac{1}{16} + \frac{1}{128} + \frac{1}{1024} + \text{\&c.}$$

Dividing by 8, $\frac{S}{8} = \frac{1}{16} + \frac{1}{128} + \frac{1}{1024} + \text{\&c.}$

By subtraction, $S - \frac{S}{8} = \frac{1}{2}$.

$$\therefore S\left(1 - \frac{1}{8}\right) = \frac{1}{2},$$

$$\therefore S = \frac{1}{2} \div \frac{7}{8} = \frac{8}{14} = \frac{4}{7},$$

$\therefore \frac{4}{7}$ is the sum of the series.

In this way the value of a repeating fraction is easily found.

Example.

Let $S = \cdot 1\dot{3}$

Then, $S = \frac{3}{100} + \frac{3}{1000} + \frac{3}{10000} + \text{\&c.} + \frac{1}{10}$.

Dividing by 10, $\frac{S}{10} = \frac{3}{1000} + \frac{3}{10000} + \text{\&c.} + \frac{1}{100}$.

By subtraction, $S - \frac{S}{10} = \frac{3}{100} + \left(\frac{1}{10} - \frac{1}{100}\right)$;

(26th.) Simplify the surd $\sqrt{3 + 2 \cdot \sqrt{2}}$.

(27th.) Expand $(1 + 2b^2)^{\frac{1}{2}}$

(28th.) Given $xy = 1225$; and $\sqrt{x} + \sqrt{y} = 12$, to find x and y.

$$\therefore S\left(1 - \frac{1}{10}\right) = \frac{3}{100} + \frac{9}{100} = \frac{12}{100};$$

$$\therefore \quad S = \frac{12}{100} \div \frac{9}{10} = \frac{120}{900} = \frac{2}{15},$$

$$\therefore \quad \frac{2}{15} = \cdot\dot{1}\dot{3}.$$

Twenty-fifth Question, as answered by W. E——

$$S = \frac{2}{7 \times 9} + \frac{2}{9 \times 11} + \frac{2}{11 \times 13} + \&c.$$

$$\therefore S = 2\left\{\frac{1}{2}\left(\frac{1}{7} - \frac{1}{9}\right) + \frac{1}{2}\left(\frac{1}{9} - \frac{1}{11}\right) + \frac{1}{2}\left(\frac{1}{11} - \frac{1}{13}\right) + \&c.\right\}$$

$$\therefore S = \frac{1}{7} - \frac{1}{9} + \frac{1}{9} - \frac{1}{11} + \frac{1}{11} - \frac{1}{13} + \&c.$$

$$S = \frac{1}{7}.$$

Twenty-sixth Question, as answered by J. W. P——

$$\text{Let } \sqrt{3 + 2\sqrt{2}} = \sqrt{x} + \sqrt{y};$$

$$\therefore 3 + 2\sqrt{2} = x + 2\sqrt{xy} + y;$$

$$\therefore x + y = 3; \text{ and } 2\sqrt{xy} = 2\sqrt{2};$$

$$\therefore x^2 + 2xy + y^2 = 9$$

$$4xy = 8;$$

$$\therefore x^2 - 2xy + y^2 = (x - y)^2 = 1;$$

$$\therefore x - y = 1, \text{ but } x + y = 3$$

$$\therefore \quad 2x = 4, \qquad 2y = 2$$

$$\therefore \quad x = 2, \qquad y = 1$$

$$\therefore \sqrt{x} = \sqrt{2}, \sqrt{y} = 1$$

$$\therefore \sqrt{x} + \sqrt{y} = \sqrt{3 + 2\sqrt{2}} = \sqrt{2} + 1.$$

Twenty-eighth Question, as answered by W. E——

$$2\sqrt{x} \times \sqrt{y} = 70$$

$$x + 2\sqrt{x} \times \sqrt{y} + y = 144$$

By subtraction, $\quad x + y = 74$

But $\quad 2\sqrt{xy} = 2 \times \sqrt{1225}$, or 70.

Whence $\quad \sqrt{x} - \sqrt{y} = 2$

$$\sqrt{x} + \sqrt{y} = 12$$

$$\therefore \sqrt{x} = 5$$

$$x = 25$$

$$y = 49.$$

EXAMINATION.—CHRISTMAS, 1840.

First Class.

Mensuration and Algebra.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission. P——, J. W.	B——, W. M., Aged 17, Admitted 12 Feb. 1840.	G——, J., Aged 15, Admitted 27 Jan. 1840.	T——, J., Aged 13, Admitted 27 Jan. 1840.	R——, W., Aged 16, Admitted 27 Jan. 1840.	C——, J. A.	F——, F. S., Aged 19, Admitted 25 June, 1840.	I——, F. V.	W——, W., Aged 14, Admitted 6 Feb. 1840.	A——, S., Aged 19, Admitted 15 May, 1840.	E——, W., Aged 14, Admitted 27 Jan. 1840.	H——, W., Aged 19, Admitted 27 Jan. 1840.	B——, J., Aged 20, Admitted 6 July, 1840.	W——, W., Aged 15, Admitted 5 June, 1840.	R——, [illegible], Aged 16, Admitted 1 August, 1840.
1	3	3	3	4	5	4	4	5	6	4	4	3	4	3	5	1
2	3	5	..	3	4	6	6	5	4	..	4	1	4	4	4	4
3	3	3	3	4	3	3	3	4	4	3	3	6	3	4	3	3
4	4	3	4	3	..	2	..	4	3	5	6	6	6	6	5	7
5	3	3	3	4	4	4	4	6	4	3	..	3	4	3	2	1
6	4	3	3	3	3	4	4	5	8	3	4	4	3	3	4	1
7	4	2	3	..	5	3	5	..	5	..	5	4	5	3	4	6
8	5	5	3	1	5	5	5	4	4	5	4	..	5	3	..	5
9	4	4	1	5	1	4	4	4	7	3	3	4	4	4	4	1
10	4	5	4	5	5	6	..	6	6	5	5	5	5	5	3	..
11	4	4	6	5	6	..	..	6	6	6	6	..	6	3	5	6
12	5	4	8	7	..	10	8	..	..	8	6	8	..	6	..	9
13	5	6	4	5	4	6	3	4	..	3	3	4	5	3	..	6
14	5	2	10	8	*8	5	10	8	10	8	8	6	8	6	8	10
15	5	6	10	8	5	10	8	5	8	4	5	7	5	10	8	5
16	4	4	..	..	..	8	6	..	10	..	..	1	..	..	..	8
17	3	3	..	4	..	3	3	..	..	..	..	4	3	..	..	..
18	4	4	..	6	..	5	4	6	..	..	..	5	5	..	..	1
19	4	3	5	4	..	4	3	4	4	4	..	3	..	4	..	1
20	6	2	..	..	..	12	..	..	..	..	..	..	..	..	..	..
21	6	5	..	8	..	10	..	..	..	..	..	8	..	..	..	..
22	6	12	2	5	..	12	..	..	..	10	..	8	..	..	..	..
23	5	..	..	8	..	8	..	..	..	..	..	8	..	..	..	..
24	5	..	..	6	5	8	..	..	..	..	..	4	5	..	..	..
25	6	..	..	1	..	5	..	..	..	..	..	6	..	..	..	..
26	6	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	5	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..
28	4	..	..	8	..	..	..	..	..	..	..	8	..	..	..	6
Totals		101	72	116	63	147	80	76	89	74	66	127	80	70	55	102

MENSURATION *and* ALGEBRAIC PROBLEMS *proposed to the Second Class.*

MR. THOMAS TATE.

1. What is the cost of flooring a room, whose length is 15 feet 6 inches and breadth 12 feet 4 inches, at 5*s*. per square yard?

2. What is the area of a circle, whose diameter is 5·1 feet?

3. Find the area of a sector, whose radius is 2·5 yards, and arc 22° 30′.

SOLUTIONS IN MENSURATION.

First Question, as answered by H. C——

15 6
12 4
186
9)191 2
21 yards 2 feet 2″ area of the flooring.
5
105
1 1¾
2,0)10,6 1¾
5 [illegible] 1¾ cost.

Second Question, as answered by S. S——

5·1 diameter.
5·1
51
255
26·01 diameter squared
·7854
10404
13005
20808
18207
20·428254 feet, area of the circle.

Third Question as answered by S. S——

2·5
2
5 0 diameter.

22·5)360(16 number of times the arc is contained in the circle.

25 square of diameter.

·785[illegible]
25
39270
15708
16)19·6350
1·22718 area of the sector. Ans.

Fourth Question, as answered by W. A——

Find the contents of the timber, (which is obtained by multiplying the length by the breadth,) which, in this case, is 36. Therefore the side of the required square is 6, because the area of the rectangle is the same as the surface of the required

4. Show how a rectangular board, whose sides are 9 and 4, may be formed into a square, without any waste of timber.

5. Trisect a right angle.

6. The area of a circle is 7·0686 feet; what is its diameter?

7. Find the area of the irregular fig. A B C D, where Am = 40 links; m r = 60 links; r B = 50 links; A D = 20 links; am = 70 links; b r = 10 links; and C B = 1 chain 40 links, where A B is the base line

8. What is the convex surface of the cylinder, whose length is 10 feet 6 inches, and diameter of the base 3 feet?

9. What is the weight of water contained in a pipe, whose diameter is 2½ inches, and length 50 feet?

10. In round numbers, the diameter of the earth is 8000 miles. Required the length of a degree upon the equator.

square. To find how a rectangular board may be cut so as not to waste any timber I divide the length of the board into 3 equal parts, and the last part I cut into 2 equal parts by a line parallel to the side whose length is 3; and then place each half on the top of the other two divisions, thus making the side

$$4 + 2 = 3 + 3 = 6.$$

Fifth Question, as answered by A. D——

With the radius C B describe the arc B A; with the leg of the compasses in the point A and the radius C B mark the arc at m, then place the leg of the compass at B, and with the same radius mark the arc at n, then draw lines from m and n to the centre of the circle c, and these lines will divide the right angle into 3 equal parts.

Refer to figure in Question 2nd. page 282.

Sixth Question, as answered by G. K——

·7854)7·0686(9 = square of the diameter.
70686

Then $\sqrt{9} = 3$ diameter

Ans. 3 diameter.

Seventh Question, as answered by H. C——

Links.

$\frac{20 + 70}{2} \times 40 = 1800 =$ area of A M N D

$\frac{70 + 10}{2} \times 60 = 2400 =$ do. $n\,m\,r\,b$

$\frac{10 + 40}{2} \times 50 = 3750 =$ do. $b\,r$ B C

·07950 = acres.

31800 roods.
40
12,72000 poles.
30¼
21,60000
18,00
78,000 yards.

Therefore 12 poles, 21 yards, 78 is the area of A B C D.

11. How many square feet of board are required to make a rectangular box, whose length is 4 feet, breadth 3 feet, and depth 2 feet?
12. How many 3-inch cubes can be cut out of a 12-inch cube?

Eighth Question, as answered by J. S——

```
  3·1416
       3
  ------
  9·4248 = circumference of the cylinder.
    10·5   height of the cylinder.
  ------
 471240
942·480
 -------
98·96040   surface of the cylinder.
```

Ninth Question, as answered by T. O——

```
            2·5     diameter.
             25
            ---
            125
            50
           ----
           6·25     square diameter.
          ·7854
           6·25
          -----
          39270
         15708
        47124
        -------
        4908750   area of the base.
              600 length of the pipe in inches.
1728)2945·250000  square inches.
        1·704427  solidity in feet.
            1000  weight of a foot of water.
     4)1704·427000 on
      4)426·106750
 lbs.  106·526687 Ans.
```

Tenth Question, as answered by C. C——

```
          Miles.
           8000 = diameter of the E in round numbers.
          3·1416
    360)25132·8000
Miles     69·813   length of a degree upon the equat[or]
```

Eleventh Question, as answered by A. D——

```
      4 ft.                                2 ft.
      3                                    4
     ---                                  ---
     12 ft. = top.                         8 = one side.
      2                                    2
     ---                                  ---
     24 ft. = top and bottom.             16 = both sides.
     16     = the sides.
     12     = the ends.                    3 ft.
     ---                                   2
Ans. 52 square feet.                      ---
                                           6 = one end.
                                           2
                                          ---
                                          12 = both ends.
```

13. What is the weight of a rectangular block of stone, whose length is 5 feet, breadth 2 feet 6 inches, thickness 4 feet, and S. G. 2500?

14. The area of a square is 64·845 feet; what is the length of the side?

15. Find the radius of a circle circumscribing a square, whose side is 5·02.

Twelfth Question, as answered by J. D——

$12 \times 12 \times 12 = 12^3 = 1728$ cubic inch in the 12 inch cube.

$3 \times 3 \times 3 = 3^3 = 27$ do. in the 3 inch cube.

Then $\frac{1728}{27} = 64$. Ans.

Thirteenth Question, as answered by C. C——

```
5 × 2½ × 4 = 50 = solidity of the block.
           2500 = weight of a cubic foot.
       16)125000 = weight in ounces.
         14)7812½ lbs.
   Ans.    558 st. 0 lb. 8 oz.
```

Fourteenth Question, as answered by H. W——

```
√64·8450(8·052 = side.
  64
1605)··8450
       8025
  16102)42500
        32204
```

Fifteenth Question, as answered by R. B——

```
        5·02
        5·02
        1004
      2510
      25·2004
      25·2004  2
    √50·4008(7·099 = diam.
      49
1409)·14068  3·549 = radius.   Ans.
     12681
14188) 132700
       127692
        ·5108
```

Sixteenth Question, as answered by W. M. L——

$$
\begin{array}{l}
x - a)\, x^3 + a^3\, (x^2 + ax + a^2. \quad \text{Ans.} \\
\quad x^3 - ax^2 \\
\quad ax^2 + a^3 \\
\quad ax^2 - a^2x \\
\qquad a^2x + a^3 \\
\qquad a^2x - a^3 \\
\qquad\quad \dfrac{2a^3}{x - a}.
\end{array}
$$

16. Divide $x^3 + a^3$ by $x - a$.

17. Add $\frac{x}{x-2}$ to $\frac{x}{x-3}$.

18. Let $\frac{x}{2} + \frac{x}{4} = \frac{x}{8} + 5$ to find x

19. $\sqrt{x^2 - 4} = 8$.

20. $\sqrt{x^2 + 3x} = x + 2$.

21. What is the sum of the series $\frac{1}{3} + \frac{1}{9} + \frac{1}{27} +$, &c.

Seventeenth Question, as answered by H. W——

$$\frac{x}{x-2} + \frac{x}{x-3} = \frac{x^2 - 3x}{(x-2)(x-3)} + \frac{x^2 - 2x}{(x+3)(x-2)} = \frac{2x^2 - 5x}{x^2 - 5x + 6}.\ \text{Ans}$$

Eighteenth Question, as answered by T. O——

$$\frac{x}{2} + \frac{x}{4} = \frac{x}{3} + 5$$

$$4x + 2 = \frac{8x}{3} + 40$$

$$12x + 6x = 8x + 120$$

$$12x + 6x - 8x = 120$$

$$10x = 120$$

$$x = 12.$$

Nineteenth Question, as answered by W. M. L——

$$\sqrt{x^2 - 4} = 8$$

$$x^2 - 4 = 64$$

$$x^2 = 68$$

$$x = \sqrt{68} = 8{\cdot}246.$$

Twentieth Question, as answered by M. H——

$$\sqrt{x^2 + 3x} = x + 2$$

$$x^2 + 3x = x^2 + 4x + 4$$

$$3x - 4x = 4$$

$$-x = 4, \text{ or } x = -4.$$

Twenty-first Question, as answered by W. A——

$$S = \frac{1}{3} + \frac{1}{9} + \frac{1}{27} + \&c.$$

Dividing by 3, $\frac{S}{3} = \frac{1}{9} + \frac{1}{27} + \&c.$

By subtraction, $S - \frac{S}{3} = \frac{1}{3}$

$$S\left(1 - \frac{1}{3}\right) = \frac{1}{3}$$

$$S = \frac{1}{3} \div \frac{2}{3} = \frac{1}{2}.$$

Answer $\frac{1}{2}$; the sum of the series.

EXAMINATION.—CHRISTMAS, 1840.

SECOND CLASS.

Mensuration and Algebra.

Number of the Questions.	Medium Value of the Questions	Name, Age, and Date of Admission.														
		C——, C., Aged 13, Admitted 27 Jan. 1840.	L——, W. M., Aged 17, Admitted 7 Feb. 1840.	W——, H. W., Aged 14, Admitted 27 Jan. 1840.	C——, H., Aged 15, Admitted 1 Feb. 1840.	P——, C., Aged 13, Admitted 21 Feb. 1840.	A——, W., Aged 16, Admitted 21 March, 1840.	H——, M., Aged 15, Admitted 7 April, 1840.	O——, T., Aged 18, Admitted 25 June, 1840.	D——, J., Aged 14, Admitted 26 June 1840.	D——, A., Aged 17, Admitted 28 Oct. 1840.	K——, George, Aged 17, Admitted 1[illegible] June. 1840.	[illegible]——, J., Aged 25, Admitted 20 April 1840.	G——, W., Aged 22, Admitted [illegible] Nov. 1840.	L——, R., Aged 15, Admitted 21 Feb. [illegible]	[illegible]
1	4	4	4	1	4	..	4	1	4	4	1	4	..	..	1	1
2	3	3	1	3	4	4	3	4	1	3	3	4	3	1	..	[illegible]
3	3	4	5	..	4	..	5	3	5	5	5	5	..	1	5	1
4	4	2	3	3	4	3	5	3	2	4	3	3	3	..	3	[illegible]
5	3	4	1	4	4	..	1	..	3	4	4	3	2	..	1	1
6	3	3	3	3	3	4	3	4	4	3	3	1	3	3	3	[illegible]
7	4	5	4	..	6	4	4	3	4	5	5	3	2	1	1	[illegible]
8	4	4	4	4	4	5	3	5	1	[illegible]	5	4	5	3	4	.
9	4	6	5	2	1	3	6	5	5	5	6	1	..	1	..	..
10	3	4	4	1	4	..	1	4	2	1	1	..	..	..	1	..
11	4	1	3	1	1	..	4	5	..	4	1	..	..	..	1	..
12	4	3	1	3	4	..	3	4	1	1	1	..	..	..	3	..
13	4	5	4	5	1	4	4	5	..	5	5	..	3	..	4	..
14	4	4	3	4	4	..	4	4	..	3	3	..	..	..	[illegible]	..
15	5	6	1	5	..	..	1	5	..	..	..	..	..	..	6	..
16	3	3	3	3	3	..	3	3	..	3	..	..	..	..	3	1
17	3	4	..	1	..	..	4	..	..	..	..	..	..	..	1	[illegible]
18	4	4	3	1	3	..	5	3	5	..	..	..	..	..	..	3
19	3	5	4	3	..	..	4	1	..	..	..	..	..	..	..	..
20	5	4	5	..	..	..	1	4	..	..	..	..	..	..	..	..
21	4	5	..	..	..	..	5	5	..	..	..	..	..	..	..	..
Totals		86	73	62	57	27	85	77	16	60	58	31	21	22	56	31

MECHANICAL PROBLEMS *proposed to the First Class.*

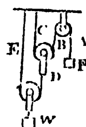
MR. THOMAS TATE.

1. How long will a body be in falling 200 feet?

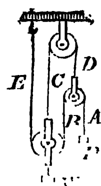
2. A body was observed to pass over 200 feet during the last second but one of its fall. Required to find the whole time of descent.

3. The diameter of the safety-valve of a steam boiler is 2 inches, the weight of the valve 3 lbs.; it is required to find the distance from the fulcrum, that a weight of 10 lbs. must be placed to give a pressure of 40 lbs. per square inch upon the safety-valve.

4. Required the advantage gained by the annexed system of pulleys (Fig. 1.)



5. Calculate the same for the system in Fig. 2.



SOLUTIONS TO MECHANICAL PROBLEMS, PROPOSED TO THE FIRST CLASS.

First Question, as answered by F. V. I——

We have by the general equation for falling bodies

$$S = t^2 \times 16.$$

Applying this equation to the present case, it will assume the form

$$200 = t^2 \times 16$$

$$\frac{200}{16} = t^2$$

$$\sqrt{\frac{200}{16}} = t$$

$\therefore\ t = 3 \cdot 5$ seconds nearly.

Second Question, as answered by S. A—— and F. F——

Let x = the whole time of descent,

Then $x^2 \times 16 = S$

$(x-1)^2 \times 16 = S_1$

$x^2 \times 16 - (x-1)^2 \times 16 = 232$ = space described during the last second.

$$x^2 - x^2 + 2x - 1 = \frac{232}{16}$$

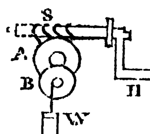
$$2x = \frac{232}{16} + 1$$

$$\therefore\ 2x = \frac{248}{16}$$

$x = \frac{248}{32} = 7 \cdot 75''$ the times of its descent.

6. Calculate the advantage of these systems of pulleys, on the principle of virtual velocities.

7. What is the advantage gained by the endless screw S, and wheels A and B, when the number of teeth in A = 64,



Number in the pinion of A = 6,
Do. in the wheel B = 36,
Radius of the pinion of B = 2 inches,
Length of the handle H = 18 inches.

8. Find, by a direct method, the centre of gravity of two balls (60 lbs. and 80 lbs.) connected by an inflexible rod, whole length is 24 inches.

Sixth Question, as answered by W. R——. (See fig. 1.)

Let P descend 4 units, then B and C will each be shortened 2 units, because P has the two ropes C and B to shorten, and the block C and the rope D will ascend 2 units. For the same reason, whilst C ascends 2 units, the block D and the weight W will ascend 1 unit. Hence the motion of W : to the motion of P : : 1 : 4; or the power gained is 4.

Case 2, as answered by S. A——

While the weight W is raised 1 foot, each of the ropes E, B, and C will be shortened 1 foot. Therefore the rope D will be let down 1 foot; and as E and B are each shortened 1 foot by this cause, P will be let down 2 feet. Therefore during the time W passes over 1 foot, P will pass over 4 feet. Hence $4 \div 1 = 4$ the power gained.

Seventh Question, as answered by J. T——

In 1 revolution of H one tooth of A will be moved round, therefore H must perform 64 revolutions to cause A to make 1. Then while A makes 1 revolution, 6 teeth in B will be moved round, because $36 \div 6 = 6$. So that to cause B to make 1 revolution, A must make 6; and to cause A to make 6, H must make $64 \times 6 = 384$. Therefore while W is raised a distance equal to the circumference of the axle B, or $2 \times 2 \times 3\frac{1}{7}$, H must pass over a space $= 18 \times 2 \times 3\frac{1}{7} \times 384$.

$$\text{Then} \quad \frac{1384 \times 18 \times 2 \times 3\frac{1}{7}}{2 \times 2 \times 3\frac{1}{7}} = \text{power gained, or } 3456.$$

Eighth Question, as answered by W. H——

Let x = the distance of the centre of gravity from the ball whose weight is 80 lbs.

$$\begin{aligned} \text{Then } 80\,x &= (24 - x)\,60 \\ 8\,x &= (24 - x)\,6 \\ 8\,x &= 144 - 6\,x \\ 14\,x &= 144 \\ x &= 10\tfrac{2}{7} \text{ in.} \end{aligned}$$

Again.—Let there be 3 balls, whose weights are 40, 20, and 10 lbs., an their distances from each other 80 and 60 respectively.

Let x = the distance of the centre of gravity from the ball, whose weight is 40 lbs.

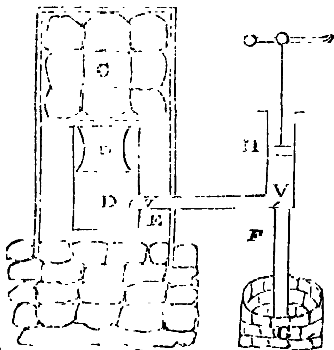
$$\begin{aligned} \text{Then } 40\,x &= (80 - x)\,20 + (140 - x)\,10 \\ 4\,x &= 160 - 2\,x + 140 - x \\ \therefore\ 7\,x &= 300 \\ x &= 42\tfrac{6}{7}. \end{aligned}$$

9. Describe the hydrostatic press.

10. Calculate the advantage gained, when the diameter of the large cylinder is 20 inches, the small cylinder 2 inches, the length of the handle 2 feet; and the distance of the resistance of the fulcrum 3 inches.

Ninth Question, as answered by F. V. I——

The construction of this machine is very simple, but its power is prodigious. It depends upon the great principle in hydrostatics, "that pressure applied to a fluid is propagated equally in every direction;" that is, "that pressure applied to any surface or area, situated in one portion of a fluid, generates a precisely similar and equal pressure upon any similar and equal surface or area, situated in any other portion of it;" thus distributing itself equally and similarly throughout the whole fluid.



B is a large solid piston, which moves vertically in the cylinder D, and fits it air-tight. From the bottom of the cylinder D runs a tube E, E′, communicating with a small forcing pump H, by means of which water is forced under the piston B, and drawn out of the reservoir G. V is a valve in the tube of communication to prevent the return of the water forced into the cylinder D, and G is a reservoir that supplies the forcing pump. One way of calculating the power gained by this machine is this:—Suppose the diameter of the forcing pump to be 2 inches (which is the case in the present problem), and the diameter of the piston B 20 inches, or 100 times greater than H; then if any force be exerted on H, it will press the water and transmit the same pressure to every part of the base of the piston B, which is equal to the base of the piston H, and thus producing a pressure 100 times greater than at H. But sometimes (as it is in the present instance) a lever is applied at the handle, by which a further power is gained, thus exerting a pressure greater by the power gained by the lever.

Tenth Question, as answered by W. R——, on the principle of virtual velocities.

Let one stroke be made by the piston, and suppose the length 1 or unity, and let x = the height to which the greater piston is raised by this stroke. Now the solid contents of the water which is forced out of H by this stroke must be = to that which is forced into B; but by the question, and the rule for finding the solidity of a cylinder,

$$x \times 10^2 \times 3\cdot1416 = 1 \times 1^2 \times 3\cdot1416$$

$$x = \frac{1 \times 1^2 \times 3\cdot1416}{10^2 \times 3\cdot1416} = \frac{1}{100}$$

the distance over which B passes, while H passes over unity or 1.

Therefore the power gained by the press = 100.
the power gained by the lever = 8.
∴ The power gained by the whole machine = $100 \times 8 = 800$.

The same, as answered by F. V. I——

See Fig. in the last question.

$$20^2 \times \cdot7854 = \text{area B}$$
$$2^2 \times \cdot7854 = \text{area H.} \;\therefore$$

$$\frac{20^2 \times \cdot7854}{2^2 \times \cdot7854} = \frac{100}{4} = 100 \text{ increase of pressure on B.}$$

The advantage gained by the lever is $24 \div 3 = 8 = P$ gained.

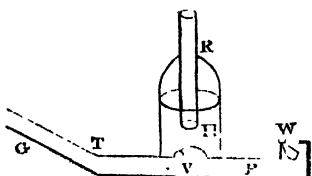
Therefore the power gained by the whole is $100 \times 8 = 800$.

11. Describe the hydraulic ram.

12. The cylinder of an air-pump is $\frac{1}{5}$ the contents of the receiver; required to find the exhaustion produced at the end of the fourth stroke.

13. Describe the common fire-engine, and calculate the mean height to which water may be thrown when the air in the machine is reduced to $\frac{1}{4}$ its volume.

Eleventh Question, as answered by J. T——



Let this figure represent a hydraulic ram. G is a sloping stream running along V, and flowing out at W, at which part of the engine is a very heavy valve W. V is a valve connecting G V W with an air-chamber H, out of which goes at the top a pipe R. After a few repeated rushes of the stream against W, it is forced to close, and then V is forced up by the reaction of the stream, and the water enters the air-chamber, and thus compresses the air contained in it. The valve W now falls by its weight, and the elasticity of the air in the chamber shuts V, and forces the water up the pipe R.

This engine can only be used when a small running stream passes the house which is to be supplied with water.

Twelfth Question, as answered by W. H——

After the first stroke the air in S will be reduced $\frac{1}{5}$ of its density.

$$\text{Then } 1 - \frac{1}{5} = \frac{4}{5} = \text{first stroke}$$

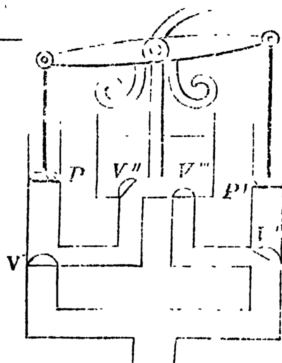
$$\frac{4}{5} \quad \frac{4}{25} = \frac{16}{25} = \text{exhaustion after second stroke}$$

$$\frac{16}{25} \quad \frac{1}{125} = \frac{64}{125} = \text{ditto} \quad \text{after third stroke}$$

$$\frac{64}{125} \quad \frac{64}{625} = \frac{256}{625} = \text{ditto} \quad \text{after fourth stroke}$$

$$\therefore \left(\frac{4}{5}\right)^n = n\text{th stroke.}$$

Thirteenth Question, as answered by W. E——

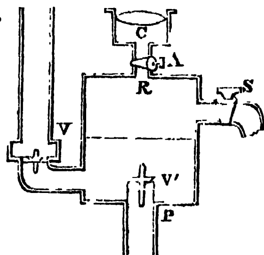


The fire-engine consists of two forcing pumps, having only one air-chamber, from which water ascends by a leathern pipe, situated at the top of the air-chamber. Now while one piston is ascending the other is descending, so that when the piston P descends the piston P′ ascends, but when P descends the valves V″ and V′ will open, and the valves V and V‴ will shut; and when P′ descends then the valves V‴ and V will open, whilst V″ and V′ will shut. The great defect in this engine is, that when the water ascends out of the air-chamber part of the air also ascends with the water, which at length causes the air-chamber to become too much filled with the water. When the air in the air-chamber is reduced to $\frac{1}{4}$ of its volume the water will be thrown to the height of 136 feet. for at the pressure of one atmosphere the water will ascend to the height of 34 feet; and when the air is reduced to $\frac{1}{4}$ of its volume the water will ascend 4 × 34, the air on the outside destroying the pressure of one atmosphere.

14. Describe Savary's steam-engine.

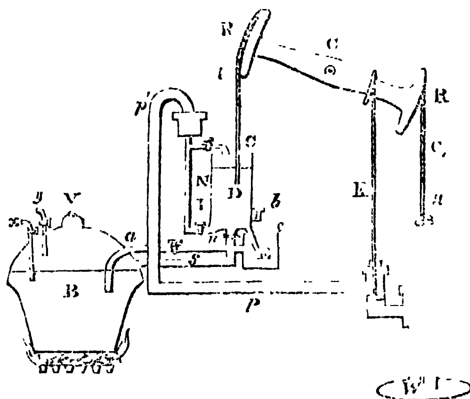
15. Describe Newcomen's steam-engine; and point out the leading improvements in Watt's engine.

Fourteenth Question, as answered by W. W——



Savary's steam-engine consists of a large cylinder R, called the receiver. S is a pipe communicating with the boiler, which supplies the receiver with steam. C is a cistern of cold water, communicating with the receiver, by means of a pipe called the injection pipe. P is a pipe by which water is to be raised from the mine or well. V and V′ are the valves opening upwards. S is a plug or cock, stopping the communication between the steam-boiler and receiver; and A is a plug or cock, stopping the communication between the cistern and receiver. On beginning to work the engine the valves V and V′ will be found shut. First open the steam-cock, and fill the receiver with steam, which will force all the air out at the valve V, then stop the steam-plug, and open the cock A, when the steam will be condensed by a jet of cold water from the cistern C. The water will then by the pressure of the atmosphere be pressed up the pipe P, and opening the valve V′ will fill the receiver R. The water will then by its own pressure shut the valve V′; then open the steam-plug, and the steam by its elastic force will press the water up the pipe V.

Fifteenth Question, as answered by J. G——



B is the boiler in which the steam is generated. S is the great steam pipe communicating with the boiler and cylinder C, where the steam is employed to produce a vacuum; x and y are gauge pipes for the purpose of ascertaining the condition of steam and water in the boiler; V is the safety valve lifting upwards, and allowing the steam to escape when its pressure becomes too great; D is a piston working air-tight in the cylinder; N is the injection pipe (supplied with water from the cold-water cistern above at A) for the purpose of cooling down the steam in the cylinder; b is a small pipe at the top of which is a valve, called a blow va.ve, the use of which is to expel the air from the cylinder; e is the eduction pipe, with a valve opening outwards, leading from the cylinder to E the hot-water well, used as a kind of reservoir to save the water that is being condensed in, and forced out of the cylinder; the water from this well is conducted into the boiler again, as required, by the pipe g. The small injection cistern well is supplied with water by a pump E, worked by the great beam F, which turns upon a centre at C; at its two extremities are sectors of circles R and $R_{\prime}$, round which chains or ropes C and $C_{\prime}$ coil, these ropes are attached to the extremities of the piston rod t, and pump rod u.

When it is required to set the engine in motion, the steam-cock S is turned, and the steam rushing into the cylinder expels the air through the blow valve b; the air

16. Show the advantage of working a steam engine expansively, as compared to the working with full pressure, when the steam is cut off at $\frac{1}{8}$ the stroke, the diameter of the piston being 20 inches, the length of the stroke 8 feet, and the effective pressure of the steam 16 lbs. per square inch.

being thus expelled, the valve closes by the atmospheric pressure, and the cylinder becomes filled with steam; when the pressure of the steam under the piston, becomes a little more than sufficient to balance the atmospheric pressure downwards, the counterpoise or weight *u* of the pump rod causes the end of the great beam to descend, and the extremity to which the piston *t* is attached to ascend,—thus an upward stroke is produced. The cylinder being now full of steam, and the extremity of the beam to which the piston rod is attached being up; at this crisis stop the steam-cock S communicating with the boiler, and open the injection cock I, then a stream of water will instantly rush into the cylinder, and cool or condense the steam; the water thus accumulated passes off by a valve into the hot-water well E; a vacuum being now formed beneath the piston, the atmospheric pressure on the upper side of the piston causes the extremity R to descend, and raises the bucket in the pump W, which descends into the well or mine. The same process is continued for every successive stroke of the engine.

The defects of this engine are, first, the great consumption of steam, and consequently of fuel occasioned by condensing the steam in the cylinder. Second. The great quantity of cold water necessary to cool down the steam. Third. The application of its power was confined to the draining of mines or pumping. Fourth. A sufficient vacuum could not be produced in a reasonable time. Fifth. A downward stroke only could be produced by means of the vacuum.

The leading improvements of Watt are, first, the condenser, a vessel in which the steam was condensed in a place separate from the cylinder. Second. The engine was really made a steam-engine, and not an atmospheric one like that of Newcomen, by causing it to make an upward as well as a downward stroke, or rendering it what is called a double acting engine. Third. The parallel motion, rendered necessary by the second improvement just mentioned. Fourth. The air-pump for pumping away the water that is being condensed. Fifth. The sun and planet motion which was a substitute for the crank and fly-wheel. To sum up all, the immortal Watt rendered the steam-engine applicable, as a moving principle, to all kinds of machinery, from the making of the steam-engine itself to the manufacturing of pens, pins, and needles.

Sixteenth Question, as answered by J. W. P——

lbs.

$20^2 \times \cdot7854 \times 16 = 5026\cdot56$

$20^2 \times \cdot7854 \times 12 = 3769\cdot92$

$20^2 \times \cdot7854 \times 6\frac{2}{3} = 2094\cdot40$

$20^2 \times \cdot7854 \times 4\frac{2}{3} = 1466\cdot08$

$20^2 \times \cdot7854 \times 3\frac{3}{5} = 1130\cdot976$

$20^2 \times \cdot7854 \times 2\frac{14}{15} = 921\cdot53$

$20^2 \times \cdot7854 \times 2\frac{10}{21} = 777\cdot92$

$20^2 \times \cdot7854 \times 2\frac{1}{7} = 673\cdot2$

$15860\cdot586$ = accumulation of pressure working expansively.

Then $15860\cdot586 \times 8 = 126884\cdot688$ = acc. press. of whole steam, working expansively.

And $20^2 \times \cdot7854 \times 8 \times 16 = 40212\cdot48$ = acc. press. at full press.

lbs. $86672\cdot208$ = advantage gained.

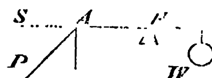
In the first part of the operation, the number by which the area of the piston is

17. Describe the crank and fly wheel.

18. The angle of elevation of an inclined plane is 31° 5′, the weight resting on the plane 10 stones; it is required to find the weight of P, acting ∥ to the plane when equilibrium takes place.

19. Required also the pressure upon the plane.

20. The force of 10 stones acts upon the lever A W, at an angle P A S of 42° 25′, and at the distance A F, of five feet from the fulcrum; it is required to find the weight which would be balanced at the distance of six inches from the fulcrum.



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multiplied is the mean of the two effective pressures. To find which, we say $\frac{16+8}{2} = 12$, and so on for the other mean numbers. The reason is, that as the volume of the steam increases, so does its effective pressure decrease; and the products of these means are added to find the pressure of ⅛ of the steam. After this is found, we multiply the sum by 8, as the steam is cut off at ⅛ the stroke, for the accumulated of pressure, were the steam admitted into the cylinder the full length of the stroke.

To find it working at full pressure, we multiply the area of the piston by the effective pressure, and also the number of feet that the piston is raised. By this means we are enabled to compare the effective pressure of the two modes of employing steam.

Seventeenth Question, as answered by W. R——

The fly-wheel may be regarded as a great reservoir of motion. Before this was applied to the engine its motion was very irregular, and consequently it could not be employed in the manufacture of linen, cloth, &c. When the motion of the engine is rapid the fly-wheel retards the motion; and, on the other hand, when the engine has a tendency to move slowly the fly-wheel assists the engine. The fly-wheel also assists in carrying the crank past the dead points, or those positions of the crank where its effective action is nothing. Some engineers suppose that power is lost by employing the crank, but their opinion is erroneous; for in those points where power is lost, motion is gained, which compensates for the loss of power. When the crank is at or near the greatest point of action, the beam descends or ascends nearly the same distance that the extremity of the crank passes over; and when near the dead points, whilst the extremity of the great beam makes a very small vertical ascent or descent, the crank passes over a comparatively large part of the circumference of the circle which it describes.

Eighteenth Question, as answered by J. B——

Sine of ∠ A = sin. 31° 5′ = ·516284

Then ·516284 × 10 st. = 5·16284 = weight required to balance ten stones on the plane.

Nineteenth Question, as answered by J. B——

Cos. ∠ elevation = cos. 31° 5′ = ·854617

Then ·854617 × 10 st. = 8·54617 = pressure upon the plane.

Twentieth Question, as answered by J. W. P—— and W. E——

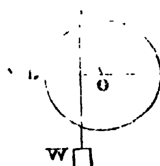
Effective force = sine ∠ 42° 25′ × 10; or effective force = ·674517 × 10 = 6·74517. Then 6·74517 × 60 = 6 × required weight or x

$$\therefore\ 6x = 404{\cdot}7102$$

Dividing by 6, then $x = 67{\cdot}4517$.

21. It is required to find the effective action of the weight W, of 50 lbs., suspended from the circumference of the wheel S O B, when the $\angle$ W S O = 34° 10′.

Fig. 4.



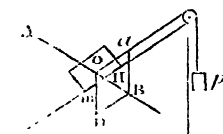
22. Given the angle of least resistance, it is required to show generally what power will just move a given body up an inclined plane.

Twenty-first Question, as answered by F. S. F——

Sine $\angle$ 34° 10′ = ·561602
lbs.
Then ·561602 × 50 = effective force
∴ 28·1801 lbs. = effective force required.

Twenty-second Question, as answered by W. R——

Fig. 8th.



Draw the line A B making $\angle$ A H C = the angle of resistance. Then draw O D = the weight of the body, and D B parallel to the plane.

$\angle$ C m D = (90° − $\angle$ C) = $\angle$ O D B; $\angle$ O B D = $\angle$ A H C = angle of resistance; then

$$180° - (\angle \text{ODB} + \angle \text{OBD}) = \angle \text{DOB}$$

$$\therefore \text{Sin.} \angle \text{OBD} : \text{sin.} \angle \text{DOB} :: \text{OD} : \text{DB} = \frac{\text{sin.} \angle \text{DOB} \times \text{OD}}{\text{sin.} \angle \text{OBD}}$$

∴ D B = O A = the force required.

EXAMINATION PAPERS.—MECHANICS.

First Division.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission. P——, J. W.	B——, W. M, Aged 17, Admitted 12 Feb. 1840.	G——, J., Aged 15, Admitted 27 Jan. 1840.	T——, J., Aged 13, Admitted 27 Jan. 1840.	R——, W., Aged 16, Admitted 27 Jan. 1840.	I——, F. V.	W——, W., Aged 14, Admitted 6 Feb. 1840.	A——, S., Aged 19, Admitted 15 May, 1840.	E——, W., Aged 14, Admitted 27 Jan. 1840.	H——, W., Aged 19, Admitted 27 Jan. 1840.	F——, F. S., Aged 19, Admitted 25 June, 1840.	B——, J., Aged 20, Admitted 30 July, 1840.	W——, W., Aged 25, Admitted 30 June, 1840.	R——, George, Aged 16, Admitted 1 August, 1840.
1	3	4	..	6	4	3	3	4	4	3	4	4	4	4	4
2	4	8	..	4	10	6	..	8	8	6	8	5	8	6	8
3	4	5	..	8	6	10	5	8	6	8	8	6	5	6	5
4	3	6	..	4	5	4	10	5	12	6	4	4	..	12	6
5	4	..	..	4	2	6	..	5	10	8	5	2	..	8	3
6.	5	..	..	8	5	6	8	..	..	..	10	..	..	..	..
7	5	8	..	10	8	8	12	6	8	5	5	5	10	..	10
8	6	8	..	6	8	6	8	3	8	8	12	6	6	10	8
9	6	10	..	10	10	10	12	8	5	5	10	8	5	5	10
10	5	6	..	6	6	12	6	6	6	6	10	6	8	5	8
11	5	8	..	10	10	6	3	8	8	..	10	8	5	5	10
12	5	6	..	11	8	10	8	..	8	8	10	..	..	6	10
13	6	10	..	10	8	10	10	..	6	10	8	10	8	8	..
14	6	..	..	..	6	8	..	8	..	8	10	10	4	..	10
15	6	..	..	12	10	10	8	6	..	8	..	12	..	..	..
16	6	12	..	12	..	12	10	12	12	12	12	..	5	12	12
17	6	..	..	[illegible]	6	10	..	..	..	..	..	10	..	..	..
18	6	..	..	8	6	8	..	10	8	..	8	6	12	6	..
19	5	8	..	8	6	..	..	8	..	..	6	6	..	5	..
20	6	10	..	10	8	10	8	10	8	8	8	3	8	..	8
21	5	4	..	5	2	..	..	10	..	..	..	6	..	..	6
22	..	..	..	5	..	6	..	..	..	..	..	..	..	..	..
Totals		113	..	163	134	161	111	125	117	109	148	117	88	98	118

Mechanical Problems.—*Second Class.*

Mr. Thomas Tate.

1. Through what space will a body fall in nine seconds?
2. How long will a body be in falling 200 feet?

SOLUTIONS TO MECHANICAL PROBLEMS PROPOSED TO THE SECOND CLASS.

First Question, as answered by J. S——

$$S = 9^2 \times 16 = 1296 \text{ ft. Ans.}$$

Fourth Question, as answered by T. O——

In a lever of the first kind the power is placed at one extremity, the weight at the other, and the fulcrum between them. To find the power gained, you divide the length of the long arm by the length of the short one; or divide the space passed over by the power, by the space passed over by the weight.

3. A body was observed to pass over 200 feet during the last second but one of its fall; required to find the whole time of descent?

4. Give illustrations of the different kinds of levers, and calculate the advantage gained by each.

5. The diameter of the safety-valve of a steam-boiler is two inches, the weight of the valve three lbs. It is required to find the distance from the fulcrum that a weight of 10 lbs. must be placed to give a pressure of 40 lbs. per square inch, upon the safety-valve.

6. Find the advantage gained by a crane when the radius of the handle is 18 inches, the radius of the cog 3 inches, the radius of the large wheel 2 feet, and the radius of the axle 2 inches.

7. The wheels A and B act on the pinions *b* and *c*; the number of teeth in the wheel A is 64, in the pinion *b*, 8, in the wheel B, 48, and

Example.—If the long arm be 12, and the short one 2, the power gained would be $\frac{12}{2} = 6$.

In a lever of the second kind, the fulcrum is placed at one extremity, the power at the other, and the weight between them. To find the advantage gained you divide the distance that P is from the centre of motion by the distance that W is from the centre of motion, or

$$\frac{W}{P} = \frac{\text{distance of P from the fulcrum.}}{\text{distance of W from the fulcrum.}}$$

In a lever of the third kind the fulcrum is placed at one extremity, the weight at the other, and the power between them. In this kind of lever there is power lost, because the weight is at a greater distance from the centre of motion than the power, and hence the weight has to pass over a greater distance than the power. To find the power lost by this kind of lever, you divide the space passed over by the power, by the space passed over by the weight.

Fifth Question, as answered by J. D——

$$\begin{array}{rl} \cdot 7843 & \\ 4 & = \text{diam. sq.} \\ \hline 3\cdot 1416 & = \text{area of value.} \\ 40 & \\ \hline 125\cdot 6640 & = \text{whole pressure on the valve.} \\ 3 & = \text{weight of the value.} \\ \hline 10)122\cdot 6640 & \\ \hline 12\cdot 2664 & \text{Ans.} \end{array}$$

Sixth Question, as answered by C. P——

The power gained by the use of the handle and cog $= \frac{18}{3} = 6$

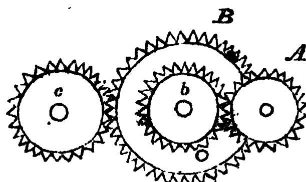
Ditto by the wheel and axle $= \frac{24}{2} = 12$

Therefore the whole power gained $= 6 \times 12 = 72$.

Seventh Question, as answered by H. C——. —See fig. to the question.

$\frac{A}{b} = \frac{64}{8} = 8 =$ number of revolutions which *b* performs, whilst A performs one; and B will make the same number of revolutions, because it turns on the same pivot with *b*. In like manner, for every revolution of B, the wheel C makes $\frac{48}{6} = 12$; but B makes 8 revolutions whilst A makes one; hence $\frac{8 \times 48}{6} = 64$ = number of revolutions made by C whilst A makes one.

in the pinion c, 6. It is required to find the number of revolutions which the pinion c makes, whilst A performs one.



8. Required the advantage gained by the annexed system of pulleys. (See Fig. 1.)

9. Calculate the same for the system in Fig. 2.

10. Calculate the advantage gained by these systems of pulleys on the principle of virtual velocities.

11. What is the advantage gained by the endless screw S, and wheels A and B, when the number of teeth in A = 64.

Number in the pinion of A . = 6
Ditto in the wheel B . . = 36
Radius of the pinion of B, = 2 inches
Length of the handle H, 18 inches.

(See fig. to Quest. 7 of the First Class.)

12. In a combination of wheels and axles, the radii of the wheels A, B, and C are respectively 12, 36, and 18, and the radii of their respective pinions × 4, 6, and 2; if a power of 40 lbs. is applied to the extremity of the first wheel A, what weight will be sustained at the circumference of the last pinion?

13. What is the advantage gained by an inclined plane whose length is six feet, and perpendicular height four inches?

Eighth Question, as answered by H. W——

Suppose a weight of 4 lbs. to be placed at W, then D and E being one continuous rope, each part will sustain 2 lbs., but D hangs by the two cords C and B, therefore each of these ropes will sustain a weight of 1 lb.; and C, B and A being one continuous rope, each part of it will have the same tension or stretch; therefore 1 lb. at P will balance a weight of 4 lbs. at W.

Ninth Question, as answered by H. W——

Suppose a weight of 1 lb. to be suspended at P, then A, B, and E will have the same tension, because they form one continuous rope; but B and A are suspended by the cord D, therefore D will sustain a weight of 2 lbs., but D C is one continuous rope; therefore the tensions of B, D, and E, will be as 1, 2, 1; now there must be a weight of 4 lbs. at the extremity of the rope G to produce these tensions. Hence 1 lb. at P will balance 4 lbs. at W.

Twelfth Question, as answered by G. K——. —See fig. to the Question.

$\frac{12}{4} = 3$ = advantage gained by A.

$\frac{36}{6} = 6$ = ditto by B.

$\frac{18}{2} = 9$ = ditto by C.

$\therefore 3 \times 6 \times 9 = 162$ total advantage.

And $162 \times 40 = 6480$ lbs. weight required.

14. Find by a direct method the centre of gravity of two balls (60 lbs. and 80 lbs.) connected by an inflexible rod, whose length is 24 inches.

15. What is the pressure of the air when the barometer stands at 30·5 inches?

16. How high may water be then raised by a common suction pump?

17. Describe the hydrostatic press.

18. Calculate the advantage gained when the diameter of the large cylinder is 20 inches, the small cylinder 2 inches, the length of the handle 2 feet, and the distance of the resistance of the fulcrum 3 inches.

Thirteenth Question, as answered by M. H——

6 ft.
12

4)72 = length of inclined plane in inches.

72 = power gained by the inclined plane.

Fourteenth Question, as answered by M. H——

Let x = the distance of the ball whose weight is 80 lbs. from the centre of gravity, then

$$x \times 80 = (24 - x) \times 60.$$
$$80\,x = 24 \times 60 - 60\,x$$
$$140\,x = 1440$$
$$x = 10\cdot\frac{2}{7} \text{ in ans.}$$

Fifteenth Question, as answered by T. O——

7·869 = weight of a cubic inch of mercury.
30·5

39345
23607

16)240·0045

15·0002 lbs. Ans.

Sixteenth Question, as answered by A. D——

Mercury is 13·598 times heavier than water.
30·5 = the height of mercury.

67990
40794

12)414·7390 inches.

feet 34·5615 = the height water may be raised.

Seventeenth Question, as answered by A. D——.—See fig. 3.

D is a vertical cylinder communicating with the pipe H by the horizontal pipe E E; H is a small piston which is attached to the handle H, by means of the piston rod F; C is a pipe communicating with a well, which supplies the machine with water; V is a valve opening towards the left, and V′ is another valve lifting upwards, which (when the piston P is drawn-up by the handle) opens and allows the water to ascend into the pipes H and E. When the piston P is pressed down, it being made air-tight, it presses the water down before it, which closes the valve V′ and opens the valve V, and thus presses up the large piston B, and with it the press-plate, which compresses the substance placed at L. When the handle makes an upward stroke the valve V closes, owing to the pressure of water in the pipe D and the weight L, and thus prevents the water from running back into the pipe E. The upward stroke answers another purpose; for it forms a vacuum in the pipe H and causes the water to rush up and open the valve V′, and by this means the pipes are supplied with water.

This machine is used to press goods into a small compass.

19. Describe the hydraulic ram.

20. The cylinder of an air-pump = $\frac{1}{5}$ the contents of the receiver; required to find the exhaustion at the fourth stroke.

21. Describe the common fire-engine, and calculate the mean height to which water may be thrown when the air in the machine is reduced to 1-5th its volume.

22. Describe Savary's steam-engine.

23. Describe Newcomen's steam-engine, and point out the leading improvements in Watt's engine.

24. Show the advantage of working a steam-engine expansively, as compared to the working with full pressure, when the steam is cut off at 1-8th of the stroke, the diameter of the piston being 20 inches, the length of the stroke 8 feet, and the effective pressure of the steam 16 lbs. per square inch?

Eighteenth Question, as answered by C. C——

$$20^2 \times \cdot 7854 = \text{area of the large piston.}$$
$$2^2 \times \cdot 7854 = \text{area of the small piston.}$$
$$\text{Advantage of the lever} = \frac{24}{3} = 8.$$
$$\text{Then } \frac{W}{P} = \frac{20^2 \times \cdot 7854}{2^2 \times \cdot 7854} \times 8 = 800.$$

Nineteenth Question, as answered by W. M. —See fig. 4.

Cr B is a pipe having a sharp descent at Cr, and ending in a horizontal pipe B, which has a valve opening downwards at W; by the quick descent at Cr the water attains considerable velocity by the time it reaches the valve W, which is very heavy, and therefore requires considerable force to shut it. When the valve W is shut, the water still rushes in at the pipe Cr, but finding no vent at W, it rushes backwards, and by its force opens the valve V′, and ascends into the air chamber C, where, by its force, it compresses the air, which reacts upon the water, and drives it up the vertical pipe R, which communicates with a cistern for the purpose of retaining the water.

Twentieth Question, as answered by C. C——

$$1 - \frac{1}{5} = \frac{4}{5} = \text{exhaustion at the end of 1st stroke.}$$
$$\frac{4}{5} - \frac{1}{5} \text{ of } \frac{4}{5} = \frac{16}{25} = \text{ditto . 2d stroke.}$$
$$\frac{16}{24} - \frac{1}{5} \text{ of } \frac{16}{25} = \frac{64}{125} = \text{ditto . 3d stroke.}$$
$$\frac{64}{125} - \frac{1}{5} \text{ of } \frac{64}{125} = \frac{256}{625} = \text{ditto . 4th stroke.}$$

Twenty-fourth question, as answered by W. A——.

Since the sum of the mean pressures multiplied by the area of the piston ∴ the accumulated pressure of the steam working expansively nearly, I find

$$314\cdot 16 \times \left\{16 + 12 + 6\frac{2}{3} + 4\frac{2}{3} + 3\frac{3}{5} + 2\frac{14}{15} + 2\frac{10}{21} + 2\frac{1}{7}\right\} = 15860\cdot 686$$

= accumulated pressure of the steam working expansively.

Now $314\cdot 16 \times 16 \times 8 = 40212\cdot 48$ = accumulated pressure working at "full pressure;" but the first result has been obtained with only one-eighth of the quantity of steam employed in the latter case;

$$\therefore\ 15860\cdot 686 \times 8 = 126885\cdot 488 = \text{expansively.}$$
$$40212\cdot 48 = \text{full pressure.}$$
$$86673\cdot 008 = \text{advantage gained by the steam working expansively.}$$

EXAMINATION PAPERS.—MECHANICS.

SECOND DIVISION.

Name, Age, and Date of Admission.

Numl ...f the Q	M... im Value Question	Age 27.	M., A 7 Feb	W—, W., Aged 27 Jan. 1 Adm	ged 15, Feb. 18	C., Aged 13, tted 21 Feb.	W., Aged tted 21 M	J—, M., Aged 1 Admitted 7 April,	D—, T., Age Admitted 25 1.	D—, J., A 14, Admitted 2 ne, 184	D—, A., Aged 17, Admitted 26 Oct. 1840.	K—, George, Aged 17, Admitted 16 June, 1840.	Aged ed 20 A.	G—, W., Aged 22, Admitted 22 Nov. 1840.	B—, R., Aged 15, Admitted 21 Feb. 1840.	S—, S., A
1	3								4	4	4	4				
2	4								5	6	5	7				
3	4															
	6		15	15		10	15						9			
	4		8	6		..	7						7			
	4		6	4		7	6						7			
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14	6						8			8	5					
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							7			7	8					
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										10						
		10	12				12									
Totals		114	119	102	74	52	118	09	89	119	103	82	59			

The 314·16 is the area of the piston, which is obtained by multiplying the square of the diameter of the piston by ·7854; the mean pressures are obtained by adding together the elastic force of the steam at any two successive intervals, and then taking the half of that result. Example—When the steam has risen to the height of two feet, the elasticity of the steam

$$= \frac{16}{2} = 8;$$

in like manner at three feet it is

$$\frac{16}{3} = 5\tfrac{1}{3}:$$

thus the elastic force upon the piston is obtained at each successive expansion of the steam, as in the annexed figure.

$= 2$

$= 2\tfrac{2}{7}$

$= 2\tfrac{2}{3}$

$= 3\tfrac{1}{5}$

$= 4$

$= 5\tfrac{1}{3}$

$= 8$

$= 16$

11

GEOGRAPHICAL QUESTIONS *proposed to both Classes.*

MR. B. HORNE.

1. What are the natural divisions of the earth's surface?
2. How many great continents are there?
3. What are the most common divisions of the land?
4. What are the common divisions of the ocean?
5. Describe the continents and their boundaries.
6. Describe the situation of the oceans.

ANSWERS TO GEOGRAPHICAL QUESTIONS PROPOSED TO BOTH CLASSES.

(As answered by W. H———.)

1. The most natural divisions of the earth are land and water, the latter of these divisions, composing about seven-tenths of the whole surface of the earth.

(By the Same.)

2. Properly speaking, there are but two great continents; one in the eastern hemisphere, comprising three smaller continents, viz., Europe, Asia, and Africa; and the other in the western hemisphere, comprising North and South America.

(As answered by A. D———.)

3. The land is divided into Continents, Islands, Peninsulas, Isthmuses, Promontories, Capes, Coasts, Mountains, Table-lands, &c

A Continent is a large portion of land which contains several nations.
An Island is a smaller portion of land entirely surrounded by water.
A Peninsula is a tract of land, which is nearly surrounded by water.
An Isthmus is a narrow neck of land which joins continents, &c.
A Promontory is an elevated portion of land stretching out into the sea.
A Cape is the termination of a portion of land stretching out into the sea.
Coasts are the boundaries of the ocean.
Mountains are very high portions of land tapering to a point.
Table-lands are level portions of land, elevated considerably above the level of the sea.

(As answered by C. ——.)

4. The principal divisions of the water are Oceans, Seas, Lakes, Gulfs, Bays, Straits, and Rivers.
An Ocean is a very large portion of salt water.
A Sea is a smaller portion of salt water.
A Lake is a body of water altogether surrounded by land.
A Gulf is a portion of water almost surrounded by land.
A Bay is a portion of water running into the land, with a wider opening than a gulf.
A Strait is a narrow passage connecting two seas.
A River is a stream of fresh water, falling into a sea or lake.

(As answered by J. W. P— —.)

5. Europe is bounded on the north by the Northern Ocean, on the west by the Atlantic; on the south by the Mediterranean Sea; and on the east by Asia, the Black Sea, the Sea of Marmora, and the Archipelago. It is scarcely possible to give an exact description of its general direction; but if we take the longest line that may be drawn across Europe, it will be from the north-east to the south-west. Europe is situated in the north frigid and north temperate zones, and lies between 10° and 63° east longitude, and 36° and 71° north latitude. This division lies to the east of Asia, and north of Africa.

Asia is bounded on the north by the Northern Ocean; on the east by the Pacific Ocean; on the south by the Indian Ocean; and on the west by Europe, the Black Sea, the Levant, the Archipelago, Isthmus of Suez, and the Red Sea. It extends in some parts greatly towards the south, but the general direction is from east to west. It is situate between 1° 20′, and 76° north latitude; and between 26° east and 170° west.

This division lies to the east of Europe.

Africa is bounded on the north by the Mediterranean Sea; on the east by the Isthmus of Suez, the Red Sea, and the Indian Ocean; on the south by the Southern Ocean; and on the west by the Atlantic.

This division lies to the south of Europe. Its northern part is the widest, and it extends from 18° west to 51° east longitude; and from 34° south to 37° 30′ north latitude. Its general direction is from north to south, but at its northern part from east to west the breadth is very considerable.

North and South America are bounded on the north by the Northern Ocean; on the east by the Atlantic Ocean; south by the Southern Ocean; and on the west by the Pacific Ocean. Its general direction is from north to south; and its situation is between 56° south latitude to an unknown northern latitude. Its longitude is, at the widest of North America, from 65° to 125° west, and at the greatest width of South America, from 45° to 82° west.

It lies to the west of Europe, and east of Asia.

(As answered by W. M. L———.)

6. The Pacific Ocean, which lies between Asia and America. The Atlantic Ocean, which separates Europe and Africa from America. The Indian Ocean, which lies between Africa, the

7. Mention the most remarkable features of each continent?

East Indies, and New Holland. The Northern or Arctic Ocean, which surrounds the North Pole. The Southern or Antarctic Ocean, which surrounds the South Pole.

(As answered by J. T— —.)

7. Europe is generally a fertile division of the globe, and is well drained by numerous rivers; but in some parts it is mountainous, though there are not many very barren tracts. Its rivers and lakes are not so large as those of America, but are very numerous. Its mountains rise to a considerable height, but not so high as those of the other divisions. The principal rivers are the Danube, which rises in the Alps, flows through Germany, Austria, and Russia, into the Black Sea; the Volga, which rises in Russia, flows south-east and east, into the Caspian Sea; the Don, which rises in Russia, and flows south-east and south into the sea of Azoph; the Dnieper and the Dniester, which rise in Russia, and flow south into the Black Sea; the Tagus, which flows west through Spain and Portugal into the Atlantic Ocean: the Seine, which flows north-west through France into the English Channel; the Elbe, which flows north-west through Germany, into the North Sea; the Thames, which flows east through the south of England; and many others. The principal lakes are Wenner and Wetter, in Sweden; Geneva and Constance, in Switzerland; Onega and Ladoga, in Russia; and Lake Windermere in England. The chief mountains are the Oural mountains, in the north east of Russia in Europe; the Carpathian mountains, in the north of Austria; the Balkan mountains, in Turkey; the Apennines, in Italy; the Pyrenees, between France and Spain; and the Dofrefield and Kolen mountains, between Norway and Sweden.

A considerable part of Asia is very barren and mountainous. It has some very large lakes and rivers, and its mountains are nearly as extensive as those of America. It contains the most considerable tracts of table-land in the world, and its islands abound in burning mountains or volcanoes.

The principal rivers are the Oby, which flows north through Russian Tartary; the Yenisei, which flows north through Russian Tartary; the Lena, which flows north through Russian Tartary; the Sagalien, which flows east and north east into the Gulf of Sagalien, through Mongolia; the Hoang-ho, which rises in Thibet, and flows east and north-east through Thibet and China, into the Chinese Sea; the Yang-tse-kiang, which rises in Thibet, and flows east and north-east, through part of Thibet and China, into the Pacific Ocean; the Irrawady, which flows south through the Eastern Peninsula, and falls into the Bay of Bengal; the Brahmapootra, which flows east and south into the Bay of Bengal; the Ganges, which flows south-east through Hindostan; the Indus, which flows south-east into the Arabian Sea; the Euphrates and Tigris, after flowing south-east, unite and fall into the Persian Gulf.

The chief lakes are the Caspian Sea, between Independent Tartary and Armenia; the sea of Aral, in Independent Tartary; Lake Baikal, in Russian Tartary, &c.

The principal chains of mountains are the Altai mountains, between Mongolia and Russian Tartary; the Himmaleh mountains, between Thibet and India, and between Mongolia and Cabul; Mount Caucasus, in Armenia; Mount Taurus, in Asia Minor; the Ural mountains to the north-west of Russian Tartary; Mount Sinai in Arabia, near the Isthmus of Suez; and Mount Lebanon, and Anti-Lebanon, in Syria.

A great part of Africa is occupied by barren lands and sandy deserts; and the central parts of it are still unknown. It has very few rivers and lakes, and its mountain chains are less extensive than those of any other part of the world. The principal rivers are the Nile, which rises in the south of Abyssinia, and flows north through Nubia and Egypt into the Mediterranean Sea; the Niger, which flows south-east into the Atlantic Ocean; the Senegal, which flows west through Senegambia into the Atlantic Ocean; the Orange river, which flows south-west into the Atlantic Ocean; the Zambezi, which flows south-east, through the south-east of Africa into the Indian Ocean.

The chief lakes are Lake Tchad, between Kanem and Bornou; and Lake Maravi, in the south-east of Africa.

The principal mountains are the Atlas chain, which runs easterly and westerly, nearly parallel to the northern shores of Africa; the mountains of the Moon, which are supposed to extend across the whole of the central part of Africa; and the Back-bone of the World, or the mountains of Lupata, which run nearly parallel with the south-east coast.

America is in some parts very fertile. It contains some of the finest lakes in the world, and some of the highest mountains. Its rivers also are the largest in size and extent of any in the world.

The northern and western parts are occupied by barbarous tribes, and are very little cultivated. The western part of South America abounds in mines of silver, and the eastern part of it is pretty fertile. The eastern part of North America is very populous and fertile. It is also in some parts mountainous, and in the mountains are immense caves, from eight to nine hundred yards in length.

The principal rivers are the St. Lawrence, which flows north-east into the Atlantic Ocean; the Mississippi, which flows south-east through the United States into the Gulf of Mexico; the Rio-del-Norte flows south-east through Mexico into the Gulf of Mexico; the Mackenzie and Coppermine rivers flow north into the Arctic Ocean; the Ohio is a branch of the Mississippi; the Columbia, in the north of the United States, flows south-west into the Pacific Ocean; the Amazon flows east through South America into the Atlantic Ocean. It rises in the Andes, and is the largest river in the world.

The chief lakes are the Slave Lake, the Great Bear Lake, and Lake Winnipeg; the two former are situated in the unexplored Indian regions: the latter between these and British America; and the lakes Erie, Huron, Ontario, Michigan, and Superior, between British America and the United States.

The principal mountains are the Rocky Mountains, extending from north to south in North America; the Alleghany mountains, in the United States; and the Andes, stretching from north to

8. Into what countries are Europe, Asia, Africa, and America divided?

England.

9. Situation, boundaries, and population of England?

10. What are the principal features of the eastern, western, and middle divisions of this country?

south in South America. The Andes are the loftiest mountains in the world, with the exception of the Himmaleh, and are all the year round covered with snow.

EUROPE.

(As answered by W. W——.)

1. The countries of Europe are, Norway and Sweden; east of Sweden, Russia; south of Sweden and Norway, Denmark: south of Denmark, Holland; east of Holland, Prussia; south of Holland, Belgium: east of Belgium and Holland, Germany; south of Belgium and west of Germany, France; south of France, Spain; west of Spain, Portugal; south of Germany, Italy, comprising the kingdom of Sardinia, the part belonging to Austria, the States of the Church, and the kingdom of Naples; south of Prussia, Austria; south of Austria, Turkey; and south of Turkey, Greece.

ASIA.

In the west, Asiatic Turkey; south of Asiatic Turkey, Arabia; east of Turkey in Asia, Persia; north of Persia, Independent Tartary; east of Persia, Hindostan; east of Hindostan, Eastern Peninsula; south of Eastern Peninsula, Malacca; north-east of Eastern Peninsula, China; north and north west of China, Chinese Tartary; south of Chinese Tartary, and north of Hindostan, Thibet; north of Chinese Tartary, Siberia; Afghanistan lies between Persia and Hindostan.

AFRICA.

In the north, Algiers; east of Algiers, Tunis; east of Tunis, Tripoli; east of Tripoli, Barca; east of Barca, Egypt; south of Egypt, Nubia; south of Nubia, Abyssinia; west of Nubia and Abyssinia, the Lybian Desert; west of the Lybian Desert, Fezzan; west of Fezzan, the Great Desert; west of the Great Desert, the Atlantic Ocean, Morocco, and Fez; south of Morocco, Zanhaga; south of Zanhaga, Senegambia; east of Senegambia, Nigritia; south of Nigritia, Upper Guinea and unknown parts; south of Senegambia, Upper and Lower Guinea; south of Abyssinia, Adel and Ajan; south of Ajan, Zanguebar, south of Zanguebar, Mozambique; south of Mozambique, Mocaranga; south-west of Mocaranga, Cape Colony; north of Cape Colony is the country of the Hottentots, Caffres, and Boshuanas; north of these the country is unknown.

NORTH AMERICA.

In the north the British territories; south of the British territories, the United States; north-west of the British territories, the Russian territories; west of the United States, Mexico; south of Mexico, Guatimala.

SOUTH AMERICA.

Columbia in the North; south of Columbia, Brazil; west of Brazil, Lower Peru; south of Lower Peru, Bolivia or Upper Peru; south of Upper Peru, Chili and La Plata; south of La Plata, Patagonia; south of Patagonia is the Island of Terra del Fuego.

ENGLAND.

(As answered by H. C——.)

9. England is situated between 50° and 55° 45′ north latitude, and 1° 50′ east, and 5° 40′ west longitude. It is bounded on the north by Scotland; on the east by the German Ocean and Straits [illegible]

[illegible] being 345 miles; and on the western side by a line drawn from Berwick to Land's End, length 425 miles. The population at last census was nearly fourteen millions, or about 240 to the square mile.

(As answered by W. M. B——.)

10. The principal features of the Eastern Division are, that for the most part it is an agricultural district, being tracts of level, rich land, upon a substratum of chalk or clay, and to the eye of the spectator presents, as it were, an extensive cornfield.

The Middle District is almost entirely manufacturing, being a fertile tract of land, varied by hill and dale, and abundantly supplied with streams, which set in motion the numerous machines employed in this district. It has also several coal fields, and valuable metallic ores.

The Western Division is barren and mountainous, fit only for pasture for cattle and sheep; but this district is rendered valuable by the numerous metals and minerals which many parts of it contain.

(By the same.)

The inhabitants collected in the Eastern District are for the most part farmers and agriculturists, who are employed in raising the abundant crops produced in that district.

The Middle District is inhabited chiefly by a manufacturing population; and the Western District is inhabited by shepherds, who are engaged in feeding their flocks; and miners, who obtain their living by extracting from this district the valuable metallic ores which it contains.

11. What effect have these on the employment of the inhabitants of these districts?

12. Into how many countries is England, including Wales, divided?

13. Give a short description of an agricultural and of a manufacturing county, under the heads' Physical features; including elevation and drainage—soil and agriculture—metals and minerals—manufactures and commerce—and chief towns.

(As answered by F. F—

12. England and Wales is divided into fifty-two counties; six to the north, comprising Northumberland, Cumberland, Durham, Westmoreland, Yorkshire, and Lancashire; 12 midland, comprising Nottinghamshire, Derbyshire, Staffordshire, Leicestershire, Rutlandshire, Northamptonshire, Warwickshire, Worcestershire, Gloucestershire, Oxfordshire, Buckinghamshire, and Bedfordshire; eight eastern,—Lincolnshire, Huntingdonshire, Cambridgeshire, Norfolk, Suffolk, Essex, Hertfordshire, Middlesex; three south eastern,—Surrey, Kent, Sussex; four southern,—Berkshire, Wiltshire, Hampshire, and Dorsetshire; three south-west,—Somersetshire, Devonshire, Cornwall; four bordering on Wales,—Cheshire, Shropshire, Herefordshire, Monmouthshire. Wales is divided into twelve counties; six northern,—Flintshire, Denbighshire, Caernarvonshire, Anglesey, Merionethshire, Montgomeryshire; six southern, comprising Radnorshire, Cardiganshire, Pembrokeshire, Caermarthenshire, Brecknockshire, Glamorganshire.

LANCASHIRE.

(As described by S. A———.)

13. Lancashire, a maritime county in the north west of England, is bounded on the north by Cumberland and Westmoreland; east by Yorkshire, from which it is chiefly separated by the hills and moors of the Penine chain; south by Cheshire, from which it is separated by the River Mersey; and west by the Irish Sea. This county is very irregular in shape, and is very narrow towards the north. In the north-west there is a large district called Furness, which is entirely separated from the rest of the county, and is situated between Westmoreland and Cumberland.

The greatest length of the county, not including Furness, from north to south, is sixty miles; its greatest breadth, from east to west, forty-three miles; and its least breadth nine miles. The area is 1831 square miles. The greatest length of Furness, from north to south, is twenty three miles, and from east to west fourteen miles. At the extreme point of Furness, to the south-west, is a small island called Walney, which is ten miles in length, and scarcely one in breadth; between Walney and the main land there are three other small islands, viz., Barrow Island, Foulney Island, and Pie Island. The coast of Lancashire is indented with several bays and estuaries; Morecambe Bay, in the north-west of the county, is formed by the greater portion of Lancashire on the north-east, and by Furness on the north-west; and is bounded at its northern extremity by a small part of Westmoreland, which contains the estuary of the Kent. Lancaster Bay, which may be considered as included in Morecambe Bay, is formed by a deep receding of the coast which receives the estuaries of the Lune and Wyre. From Rossall Point, the extreme south-west limit of Lancaster Bay, the coast runs very nearly due south to the estuary of the Ribble, and thence is continued, in an almost round unbroken line, to the estuary of the Mersey; from the estuary of the Kent to that of the Mersey the coast is low and sandy, except for a few miles between the Wyre and Ribble, in the neighbourhood of Blackpool, where clay cliffs occur.

The surface of the county in the southern and western parts is flat; the eastern and northern parts are occupied by offsets from the mountains of the Penine chain and those of Cumberland. The high land of this county is not of so great an elevation as the mountains in Cumberland, but it occupies a greater surface, and forms extensive moorlands. Several mountain ridges occur between Rochdale and Clitheroe, and the whole of the county east of a line joining these two towns may be considered as a part of the Penine chain. The principal elevations of this county are Coniston Fell, in the north of Furness, which may be considered as a part of the mountains of Cumberland, 2577 feet above the level of the sea; Pendle Hill, near Clitheroe, 1803 feet; Bleasdale Forest, on the east border, near Garstang, 1789 feet; and Rivington Hill, near Bolton, 1545 feet. Between the mouth of the Wyre and the Ribble, the Fylde county, as it is called, forms an extensive tract between the road from Preston to Lancaster and the sea. This tract, which is in general level, or slightly undulating, contains extensive peat mosses. From the Ribble to the mouth of the Mersey the land is one uniform level, stretching inland for several miles until it approaches the high lands, which, in the neighbourhood of Liverpool, come close to the estuary of the Mersey.

Drainage.—The principal rivers are the Mersey, the Irwell, the Wyre, and the Lune. The Mersey has its origin in a number of small streams near the junction of Derbyshire, Cheshire, and Yoskshire. For a short distance it forms the north-eastern limit of Cheshire, under the name of the Etherow; it is then joined by a stream called the Goyt, and flows to Stockport, where another stream, called the Thame, falls into it; the united streams here take the name of the Mersey, which forms the southern boundary of the county, and empties itself into the Irish Sea by a wide estuary. It has been made navigable as far as the Irwell, which has its source in the moors near the Yorkshire border, flows to Bury, and after running in a south-easterly and westerly direction, it passes Manchester, and unites with the Mersey south-west of Manchester. The Ribble rises in the West Riding of Yorkshire, and forms for a short distance the boundary between the two counties, receiving from the east the Calder; it then pursues its way to Walson, near Preston, where it immediately widens into a shallow and broad estuary, which, though it makes a great gap in the line of coast, is not navigable for ships of any great burthen, but has been made navigable for small vessels. The Lune has its source in the high lands of Westmoreland, passes Kirkby Lonsdale, and takes a south-westerly direction to Lancaster, where it opens into a wide estuary, which joins the

sea in Lancaster Bay. The Calder rises among the moors on the borders of the county, and flowing westward joins the Ribble. There are no rivers of importance in Furness; Windermere, the largest of the lakes of Westmoreland and Cumberland, lies between Furness and Westmoreland, but is entirely included in Westmoreland. The direction of the rivers of this county, from north to south, indicate the general direction of the valleys and of the high land in this district. Salmon is found in nearly all the large rivers of the county.

Navigation and Commerce.—Inland navigation, and other means of rapid communication, have been extensively prosecuted in this county. Little more than a century ago, even the rivers were useless for the conveyance of goods. At present there are numerous canals, which form connecting links, not only with the towns of this county, but with every part of England. In 1720 an Act was passed for making the Mersey and Irwell navigable between Liverpool and Manchester, by means of straight cuttings, locks, and wears. Vessels of fifty tons burden were thus enabled to navigate these rivers to their junction at the two towns, being a course of about fifty miles. There are numerous canals in this county, which are connected with canals of other counties. Among these may be mentioned the Duke of Bridgewater's canal, which, when begun, was only intended to connect the extensive coal mines belonging to the Duke at Worsley with Manchester, by a cut five miles in length. The main canal extends from this cut to Preston Brook in Cheshire, where it joins the Grand Tunk canal, after a course of eighteen and a half miles on the south bank of the River Mersey. From this canal there are various branches, which cross the county in every direction. The Leeds and Liverpool canal commences at Liverpool in a basin, the waters of which are considerably above the tides of the Mersey. The Lancaster canal commences near Wigan, and forms part of the Leeds and Liverpool canal, forming a communication between Leeds, Liverpool, and Wigan; the Rochdale canal commences at the Duke of Bridgewater's canal, Manchester, and runs to Lowerbridge, near Halifax, in Yorkshire; the Ashton canal commences in the Rochdale canal, near Manchester; from this canal a branch connects it with the Huddersfield canal, connecting Ashton, Rochdale, Manchester, and Huddersfield; besides these there are many lateral cuts, which are connected with the different factories of the district. There are also several railroads in this county, which facilitate the conveyance of goods and other commodities to the neighbouring towns, and to all parts of England. The railroad between Manchester and Liverpool was completed in 1830; it is the first great railroad that was made in England; the Warrington and Newton railway is a branch of the Liverpool and Manchester line; it now forms part of the Grand Junction railway, which connects Birmingham with Liverpool; there is a line from Newton to Preston: one from Manchester to Leeds; one from Manchester to Stockport; and some others connecting the towns of this county with every part of England. It will be seen from this hasty enumeration of the different means Lancashire has adopted and carried into execution for facilitating the communication of one town with another, that she at the present time possesses superior advantages for trade and commerce over any county in England. This county is the great seat of the cotton manufacture as Yorkshire is of the woollen, but fabrics of silk and linen are manufactured on a very extensive scale. Hat making, calico printing, bleaching, dyeing, machine making, iron founding, and the making of paper, glass, and earthenware, are also carried on to a great extent. Steam carriages were first brought into operation on a large scale in this county, on the railroad between Liverpool and Manchester. Through the port of Liverpool a great part of our commerce is carried on with North and South America, the West Indies, and Ireland.

The exports of this county consist of the manufactured goods of England, such as earthenware, cutlery, hardware, cotton and woollen goods, &c., and the imports, of the produce of America, the West Indies, and Africa, such as tea, coffee, flour, hides, indigo, rice, rum, sugar, &c.; and cotton wool, for which Liverpool is the great market of the kingdom, between 700,000 and 800,000 bales are imported annually.

Lancashire may be said to owe its present greatness to certain physical causes, of which the following are perhaps the principal. The county is possessed of a large coal-field, that furnishes the people employed in manufactories with an abundant supply of fuel to work their machinery; another cause of superiority is its plentiful supply of water, which is of the most essential service in manufactories of all kinds where machinery is employed; the cause of this abundance of water may be attributed to its situation, for by referring to the map it will be seen that it is situated in the west of England, and exposed to the moist winds that blow from the Atlantic Ocean. These winds meet with no opposition until the high land of this county obstructs their passage, when the moisture they carry becomes a kind of dew on the mountains, and flows down their sides in small rivulets, ultimately forming the different rivers which drain the county.

Towns.—Liverpool, the commercial capital of Lancashire, is situated on the north-eastern bank of the river Mersey. With the exception of London, it is the largest commercial port of England. Its progress in the last few years has been very rapid. In 1565 it contained only 138 householders, and had only 223 tons of shipping; soon after 1700 it began to be of importance; and in 1710 the first dock, called the old dock, was constructed. Its wet docks at the present time cover an area of upwards of ninety acres, and afford accommodation to vessels at all states of the tides.

Liverpool now extends between three and four miles along the banks of the river Mersey; the average width is about two miles. Many of the streets in the older part of the town are narrow, ill-built, and dirty, but these parts are gradually being improved, and most of the new streets are wide and airy, well-paved, and lighted with gas. Some of the public buildings are on a large scale.

There must always have been a considerable port at the mouth of the Mersey; but the estuary in its natural state could never have come in competition with the Humber and Severn. When, however, its disadvantages as a sea-port were removed by the formation of wet docks, and, much more, when the county became the basis of a canal system, reaching eastward to the German Ocean, and southward to the Thames, Liverpool could communicate with an immense interior circle. It derives benefit, above all, from the cotton manufactures, which were established on an extensive scale, the materials of which were brought to Liverpool from the opposite side of the Atlantic, and the finished fabric thence exported, partly to the same quarter, and to a great part of England. The docks contribute greatly to its importance. The construction of these docks is the admiration of the world. The chief articles of import are cotton, sugar, rice, coffee, tea, indigo, hides, &c., besides other articles of consumption. Liverpool has numerous lines of packets to all the principal foreign ports, and trading vessels are sailing continually to all parts of the world.

The inhabitants of Liverpool have always distinguished themselves for the spirited manner in which they have conducted their arrangements, and more especially those which are connected with trade. The public buildings of the present day have an elegant and classical character, peculiar to Liverpool. The Town Hall is a fine Grecian edifice, ornamented with a superb cupola and appropriate statues. The Exchange forms behind it an elegant square, in the midst of which is a sculptural composition representing Nelson and his victories. The market, which has lately been built here is perhaps the most commodious of any in the kingdom. Population, 165,175.

Manchester, the centre of British industry, and the manufacturing capital of the empire, is favourably situated upon the banks of the Irwell, which is navigable for barges as far as Manchester.

Although the cotton manufacture is widely diffused throughout England, still Manchester continues the centre of the trade, receiving and distributing the raw material and collecting the produce worked up in various towns and villages. Though a Roman station, and consequently of high antiquity, no monuments of importance date earlier than the fourteenth century. Even at that period, it is recorded as an industrious town, carrying on a considerable trade in linen and woollen. From the middle of the last century it has advanced with amazing rapidity, as the system of inland navigation afforded copious channels by which the raw material could be introduced, and the manufactured article exported, removing every obstacle to the absorption of the whole into this centre. The discoveries of Hargraves, Crompton, and Arkwright, though made in distant quarters, may be said to form the basis of the cotton manufacture. Its manufactures do not consist exclusively of the finer muslins and other delicate fabrics, but embraces the plain and useful, such as dimities, velveteens, fustians, checks, shirtings, &c. The different cotton fabrics, denominated Manchester goods, are not all manufactured in the town, but in the surrounding towns and villages, and after being bleached, and some of them printed, they are sent to Manchester to be sold. The chief market days are Tuesdays and Saturdays. A vast quantity of yarn is also spun for exportation. There are also extensive establishments for printing and dyeing and for constructing and keeping in repair steam-engines, as well as other machines employed in manufacture. Manchester now rivals Macclesfield and Norwich in the manufacture of silks, and Nottingham in that of lace. A few years ago there were at work in Manchester and Salford (which may be considered as part of the same town) ninety-six cotton mills, sixteen silk mills, and four woollen and flax mills, besides various other manufactories of minor importance. Manchester is rather an irregularly-built town. The streets are extremely narrow compared with those of London, and in consequence of the vast quantity of rain which falls in this county, it is one of the most filthy places a person can possibly enter. It has many charitable institutions, and is possessed of many fine buildings, among which may be mentioned the Town Hall, the Exchange, and the Infirmary. Population of Manchester 237,832. Within a short distance from Manchester are the towns of Blackburne, Bolton, Wigan, Bury, Ashton-under-Lyne, Preston, and Rochdale, all of which are employed in cotton, woollen, and other manufactures; indeed, these towns are so similar to Manchester in everything relating to trade and commerce, that all the county, from the Mersey to the Ribble, may be considered as one vast manufacturing town, containing a population somewhat exceeding one million.

Population of the county, 1,336,854.

Lincolnshire,

(As described by J. G——.)

Lincolnshire, south of Yorkshire, is bounded north by Yorkshire, from which it is separated by the estuary of the Humber; east by the German Ocean; south-east by the Wash, which separates it from Norfolk; south by Cambridge, Nottingham, and Rutland, from which it is partially separated by the rivers Welland and Nen; and west by Leicester, Nottingham, and Yorkshire. A range of elevated land of the oolite formation extends from the Humber on the north to the southern boundary, with some interruptions, through which the rivers pass in their course towards the sea. This range presents the appearance of a plateau or table-land, and appears to be a continuation of the Wolds of Yorkshire. Except this range there are no other elevations of importance; the whole of the county towards the east being a low, and in some places a marshy, district, whilst the part of the county to the west of this range is scarcely more elevated.

Drainage.—The estuary of the Humber skirts the north boundary of this county. The Trent, from Nottinghamshire, forms, for a considerable distance, the western boundary of Lincolnshire, flows north, and falls into the Humber. The Witham rises in the north-west of Rutland, flows north through Lincolnshire, then turns east, passing the city of Lincoln, and flowing south-east, discharges itself into the Wash. The Welland forms part of the southern boundary between this county and Nottingham, flows north-east through Lincolnshire, and falls into the Wash. The Nen, from Northamptonshire, forms part of the boundary of Lincolnshire, and separates it from Cambridge. The Lud flows in an easterly and north-easterly direction, into the German Ocean. The Ancum or Anxholme flows north, and falls into the Humber, some miles below the juncture of the Ouse and Trent.

Lincolnshire is divided into three districts—Lindsey, Kesteven, and Holland. Of these the district of Lindsey is by far the most extensive, comprehending the whole of the county that lies north of the Witham. In the north-east part of this district is a large tract of heathy land called the Wolds, extending south from Barton-on-the-Humber to the east of Horncastle, where are bred large flocks of sheep of a species distinguished for long wool, much used in the manufacture of coarse woollen cloth. In the north-west of this division is the district called the Isle of Anxholme, formed by branches of the Idle, Trent, and Dun. This isle is a low fertile tract, in which much flax and hemp are cultivated, as also great quantities of turnips. The district of Kesteven comprises the south-west part of the county, from near the centre, and although there are some tracts of heathy land in this division also, it is upon the whole a fertile tract. The remaining district is appropriately called Holland, being low or hollow land, resembling in its physical character the province of the Netherlands of the same name. The fens or marshes, for which this county is distinguished, are partly in the district called Kesteven, but by far the greater number of them are in the division called Holland. A great part of the county which lies contiguous to the sea is unproductive or marshy land; but large tracts have been reclaimed, and protected by embankments on the sea coasts and on the banks of the rivers, forming a tract of highly fertile land, inferior to few tracts in

the kingdom. Among the undrained fens of this county, large flocks of geese are raised on account of their quills, and as an article of provision. The geese are plucked four times a year, at Lady-day for quills, at the other times for feathers. Thus several acres of marshy land, otherwise unproductive, are rendered a source of profit to the proprietor and tenant. These fens also abound in wild-fowl, such as ducks, geese, teal, and widgeon, and immense flocks of starlings likewise resort to the marshy land during the winter season.

The method of taking wild-ducks by decoys may be reckoned among the curiosities of Lincolnshire. A decoy is generally situated in a marsh so as to be surrounded by wood or reeds; and on a large pond, decoy ducks are bred so tame that they will feed from the hand. Their food consists of hempseed, oats, and buckwheat. The decoy birds take flight from time to time, and return with numerous flocks to the ponds, where they were accustomed to be fed. From the ponds are cut channels, narrowing gradually towards the end, and covered with a funnel-shaped net; hempseed or buckwheat is thrown in small quantities before the mouths of the channels to allure the birds to enter, and when they have done so, the decoy man, who has been all the time concealed, then advances, and the ducks, unable to return or to fly upwards on account of the net above, rush towards the end, where they are easily taken by the hand. These birds form an article of commerce, being sent to the London market. Lincolnshire possesses no minerals, and is also destitute of any manufacture of importance. Among its agricultural products are grain of all kinds in the high grounds, while in the marshy districts, flax, hemp, turnips, and woad are cultivated.

Lincolnshire, however, is not an agricultural county; its distinguishing characteristic being that of a grazing county; and its pastures are noted for raising cattle of the greatest size and weight. In the Wolds is raised a fine breed of horses; and rabbits formerly used to form a profitable speculation, but since the increase in the value of the land they are less reared than formerly.

Chief Towns.—Lincoln, an ancient and once distinguished city, is situated on a hill, at the base of which flows the Witham. It once had fifty churches, but its ancient splendour has now left it, and with it its churches; twelve only now remain, together with the cathedral, a handsome Gothic structure. In the cathedral of this city is the great bell called Tom of Lincoln, which weighs five tons, eight cwt., and requires fifteen men to ring it.

Population of Lincoln, 11,843.

Boston, on the Witham, has a considerable share in the Baltic trade, and some manufactures of sailcloth, canvas, &c. Population, 11,240.

Gainsborough, on the Trent, carries on a considerable trade with Manchester, Liverpool, Gloucester, Bristol, and Hull. Population, 7,535.

Stamford, an ancient town on the Welland, has no considerable trade; but it imports coal, and exports malt, corn, and freestone. Some additional towns are Barton, with a population of 2,333; Louth 6,927; Grimsby 4,225; Spalding 6497.

Population of the county of Lincoln 317,244.

Gloucestershire,

(As described by W. M. B———.)

Gloucestershire is bounded on the north by Warwickshire and Worcestershire; on the south by Somersetshire; and on the west by Herefordshire and Monmouthshire. It is of a very irregular form, projecting into the neighbouring counties on the north-east and south-west. Its extent from north-east to south-west is fifty-two miles, and from east to west forty-three miles.

Elevation.—The aspect of this county varies extremely. To the east of the Severn, at the distance of from six to ten miles, is a range of hills called the Cotswolds, running through the whole of the county in a north and north-east direction, rising in some parts to a considerable height. On the east side of the Severn, between it and the hills, is an extensive vale, its length from north to south being about forty miles, and its breadth from east to west varying from four to eight. On the west of the Severn, and separated by it from the rest of the county, is the forest district, which presents an undulating aspect, being diversified with hill and dale.

Drainage.—The principal rivers are the Severn, which enters the county from Worcestershire, flows south-west to Gloucester, where it divides into two branches, which reuniting a little below the city, enclose a small tract of land called Olney Island. From Gloucester it flows in the same general direction to Newnham, where it widens into a broad estuary, and flows into the Bristol Channel. The Wye from Herefordshire flows southerly, forming the boundary between this county and Monmouthshire, into the estuary of the Severn. The Upper Avon from Worcestershire flows south-west to Tewkesbury, where it joins the Severn soon after its entrance into this county. The Lower Avon from Wiltshire flows north-westerly, forming part of the boundary between this county and Somersetshire, and enters the estuary of the Severn about five miles below Bristol. The North Frome is a small stream which, rising near Wickwar, flows southerly, supplying in its course a number of mills and manufactories, enters Bristol on the north side of the city, after passing through the centre of which, it falls into the floating-dock of the Avon, the last half-mile of its course being used as a dock and harbour. The Stroud rises near Brimpfield, flows south-westerly past Stroud into the Severn about seven miles south-west of Gloucester. The Isis or Thames has various sources, one of which is situated about five miles and a half east of Malmsbury, near Raven's Roost Wood. The Swill brook, perhaps its chief source, rises three miles and three quarters north-east of Malmsbury at West Crudwell. These two streams, joining at a point three miles west of Cricklade, form the Thames, which flowing north-east and east, enters Oxfordshire, forming the boundary between that county and Berkshire. The Caln or Coln, one of the principal rivers of the county, rises a little to the north of Cheltenham, and taking a winding course to the south-east, joins the other streams which unite with the Thames at Lechlade. The Windrush rises near Winchcombe, and flows south-east and east into Oxfordshire. The Ledden rises in Herefordshire, and flows south-easterly into the Severn at Gloucester.

The canals of this county give it an extensive communication with other parts of the kingdom. The Thames and Severn canal connects the navigation of the Thames with that of the Severn. It commences at Lechlade on the confines of the county, where the Thames ceases to be navigable; near Stroud it is carried through Sapperton Tunnel, which is 4,300 yards in length. It then continues its course under the name of the Stroud-water canal, and enters the Severn about seven miles below Gloucester. The Hereford canal, intended to connect the towns of Gloucester and

Hereford, is not yet completed, being opened only from Gloucester to Ledbury. The Gloucester and Berkeley canal commences in the estuary of the Severn, at Sharpness Point, about three miles fron. the town of Berkeley, proceeds north-easterly, crossing in its course, by an aqueduct, the Stroud-water canal. Near the Severn it is sufficiently capacious to allow West Indiamen and other large vessels to come up to Gloucester, being eighteen feet deep, and seventy feet wide. Its whole length is sixteen miles and a half, while the river, in consequence of the numerous turnings in this part of its course, measures from point to point of the canal twenty-eight miles.

Railways.—The Bristol and Gloucester railway is intended to pass through the county from north to south connecting the towns of Bristol and Gloucester. The Great Western railway from London to Bristol is nearly completed at this end of the line as far as Bath. The Union railway commences at Gloucester, and, crossing the county, joins the Great Western. A railway has also been constructed between Gloucester and Cheltenham, by which the latter place is supplied with provisions.

Soil and Agriculture.—The soil of the hill district is in general a light loam, changing in the little valleys into a stiff clay. The upper soil is everywhere of little depth, averaging not more than five inches. This district contains 200,000 acres, and consists of a long tract of undulating high ground, in some parts bleak and bare, but in others yielding a short fine grass well adapted for sheep pasture, to which purpose it is chiefly appropriated. The land under cultivation is enclosed by stone walls. Corn, turnips, and the artificial grasses are the principal crops. It is well watered, as the hills abound with springs, and every valley has its little stream. The vale district contains about 100,000 acres, and the soil is of the richest kind, being mostly of a deep black loam of uncommon fertility, partly under the plough, and partly in pasture. This district is divided into Upper and Lower, or the Vale of Gloucester, extending from Gloucester northwards, and the Vale of Berkeley, extending from the Painswick and Matson hills southwards. In the vale of Gloucester considerable quantities of corn are raised. The vale of Berkeley is chiefly devoted to dairy farms, and to the rearing of cattle. There is some arable land towards the upper angle, but with this exception nearly the whole is laid out in grass. The produce of the orchard is likewise an object of attention to the vale farmer, as considerable quantities of cider and perry are made annually. The forest district, which comprises nearly 40,000 acres, is chiefly occupied by the Forest of Dean, which formerly furnished the greater part of the supply of timber for the British navy. It is likewise well stocked with orchards producing excellent cider.

Metals and Minerals.—Throughout the whole of the forest district extends a great bed of coal and ironstone; between one and two hundred pits have been opened for procuring the coal, but the ironstone, not being very rich in metal, is comparatively little worked. To the north of Bristol is another coal-bed of the same kind, which also contains veins of lead and some iron ore; the lead and iron are not worked, but the coal supplies the immense consumption of the manufactories of Bristol. This coal-field extends in an irregular manner for about twenty-five miles. About ten miles of the course of the Avon lies through it, dividing it into two great parts; that to the north of the Avon being the most extensive. A good compact limestone is found in the forest, and a very superior kind is obtained in great abundance to the north of Bristol. Freestone of excellent quality is found in the hills, more especially at Painswick, blue claystone for building, in the vale, and paving-stones in the forest. At Dursley is a stratum of tophus or puffstone, so soft as to be worked with facility, but upon exposure to the air it becomes uncommonly hard and durable. The walls of Berkeley Castle are built with this stone, which after having stood for centuries are still in good repair. There are medicinal springs of great efficacy in this county; those of Clifton and Cheltenham have been long celebrated, and one has been lately discovered near Gloucester, which surpasses either of the others in its strength and effects.

…stershire is that of cloth, which is carried on

STAFFORDSHIRE,

(As described by W. E— —.)

Staffordshire is bounded on the north by part of Cheshire and Derbyshire; on the east by Derbyshire; on the south by Worcestershire; and on the west by Shropshire. Its greatest length from north to south is about fifty four miles, and from east to west thirty-four miles. The aspect of Stafford varies in different parts. In the middle and south-west it is either generally level, or interspersed with eminences, which rarely rise to a great height. In the south and south-east, a few lofty ridges appear to give a variety to the scenery. Towards the north, the moorlands of Stafford, as they are called, occupy a considerable space; and in this hilly tract, on the north-eastern boundary of the county, is the common water-shed of the basins of the Weaver, the Trent, and the Dove.

Drainage.—The principal rivers are the Trent, the Dove, the Blythe, the Sow, the Penk, and the Stour. The Trent rises in the moorlands, and thence takes a southerly direction through the Potteries, after which it takes a south-easterly course, and continues in this direction till its junction with the Tame. After its junction with the Tame it turns to the north-east and forms the boundary of the county, till it is joined by the Dove. The Tame rises in the southern part of the county, thence flows into Warwick: at Tamworth it again enters the county, and continues its course till its junction with the Trent. The Blythe rises in the north, and runs parallel to the Trent for some distance, after which it falls into that river near King's Bromley. The Sow rises near Eccleshall, and flows to Stafford, where it joins the Penk.

The canals in this county are numerous. The principal canal is the Trent and Mersey or Grand Trunk canal, which thence takes its course into Cheshire, after it is joined by numerous branch canals. The Grand Junction canal passes through the greater part of this county. Besides these there are numerous other canals, and some railways also pass through this county.

Soil and Agriculture.—The soil of this county varies from stiff and strong clay to loose and light sand. The strong clayey soil prevails in a tract between the Trent and the Dove. Another tract of

Scotland.

14. Into how many divisions may Scotland most naturally be divided? Mention the general character of the face of the country in each.

the same soil extends from the Stour northwards to Brewood. The light soil occurs in a tract which stretches from the Trent southwards along the Tame, and the eastern border of the county. Staffordshire is well stocked with wood of every description, and many plantations of valuable timber are scattered throughout the county. The agriculture is principally arable, but along the banks of the rivers there is much long grass; and more cattle and sheep are reared than are sufficient for the consumption. The usual crops are wheat, barley, oats, beans, vetches, turnips, rye, and some of the artificial grasses.

Metals and Minerals.—Coal abounds in this county, but the quality is inferior to that of the best Newcastle coal. Ironstone is also extensively distributed, and limestone is very abundant. The coal-beds in the southern part of the county cover an area of about sixty square miles. Various beds of clay and ironstone alternate with the coal strata. The abundance of coal and iron, and the nearness of excellent limestone and fire-clay render this southern district most active in mining and manufacturing industry, and give it a most striking and singular appearance. The effects of mining

by the dense volumes of ascending smoke, and at night the scene is still more striking, the whole horizon seeming to be lighted by the innumerable coke fires and blast furnaces. In the north part there are two smaller coal-fields in the neighbourhood of the Potteries. The ironstone, which usually lies under and alternates with the coal, is likewise worked. Copper and lead ores are found in this county, and both of them are worked. Potter's clay of several sorts is found. In the vicinity of Newcastle is the district of the Potteries, which occupy an extent of about ten square miles. Within this space are several populous towns and villages, in all of which almost the only employment of the inhabitants is the manufacture of porcelain, earthenware, and other ware of which clay forms part of the material. Throughout all this district the soil contains a great variety of clays which are adapted to the use of the potters. One kind of clay, which is almost peculiar to this district, will bear an intense degree of heat, for which quality it is of the greatest use to the porcelain manufacturers, by whom it is made into cases called seggars, in which the porcelain is put into the ovens to be hardened. Under the clay are rich beds of coal, which are easily worked. With these natural advantages potteries were easily established here; and some antiquarians suppose that they have existed on this spot ever since the time of the Romans. However this may be, the manufacture was confined to a few objects of the commonest and coarsest description, till about the end of the eighteenth century, when it was improved by two Dutchmen of the name of Elers, and subsequently by Ashbury; but it remained for Wedgwood to give that value to English pottery that it at present holds, and to render it an article of commercial importance.

Towns.—Stafford, the county town on the north bank of the river Sow, near its confluence with the Penk, and about six miles in a straight line from its junction with the Trent. It has three churches, two of which are of great antiquity, besides various places of worship for Dissenters. The chief manufactures are of boots and shoes. There is also considerable tanneries, and some trade is carried on by the inland navigation. Population 6,900.

Newcastle-under-Lyne is an ancient town which derives its name from a castle now in ruins, but which when built was termed New Castle, to distinguish it from an older one in the neighbourhood, and the appellative under-Lyne, from a forest in Cheshire of that name. There are other towns in the neighbourhood which have the same appellation. The district of the Potteries lies in the vicinity of this town, but they have been already described. Population 8,100.

Wolverhampton, one of the most extensive and populous towns in Staffordshire, is situated on a rising ground, and in the vicinity of numerous coal-mines. The manufacture of japanned ware, locks, keys, and similar articles form a very large branch of business; nearly 2,000 men of twenty years old and upward are occupied in the manufacture of all kinds of iron ware.

Walsall, a market-town, is situated on a pleasing gentle elevation. Various manufactures are carried on in the town, chiefly of guns and other fire-arms. Gas-tubes and all kinds of hardware, that are employed in machinery, are also made here.

Lichfield, an ancient city, one of the principal places in the southern division of the county, is likewise a county of itself. The limits of the county extending over a space of which the greatest length is three miles, and breadth two miles and a half.

The chief manufactures of Lichfield are its horse-sheetings and sail-cloths.

SCOTLAND.

(As answered by W. M. I

14. Scotland is most naturally divided into three divisions--northern, middle, and southern. The northern division extends from the Pentland Firth to the Caledonian canal, and is generally mountainous and cold, but there are a few fertile tracts on the eastern coast. The middle division extends southward from the Caledonian canal to the firths of Forth and Clyde. The general appearance of this part of the country is much the same as the northern, being very mountainous, but there are some very fertile tracts extending along the eastern coast. The southern division extends to the border of England, and in soil and appearance bears a great resemblance to that country. There are some lofty ranges of hills and a vast extent of moorland, yet its general appearance is that of well-watered plains, producing good crops of all kinds of corn, &c.

15. What is the most remarkable distinction between the natives of the Highlands and the Lowlands of Scotland?

Questions on the Globes, proposed to both Classes.

MR. T. TATE.

16. Give a rule for finding the length of any given day.

17. Why does the length of a degree of longitude decrease towards the poles?

18. Describe a method for laying down the lines of longitude and latitude in a map of the world.

19. Describe the same for a map of England.

15. (As answered by W. M. L———.)

The great distinction between the Highlanders and Lowlanders of Scotland is their language. The inhabitants of the Highlands are of Celtic origin, and speak the Celtic or Gaelic language. They are also more hardy than the Lowlanders, nor are they generally so well educated. The Lowlands of Scotland are inhabited by a race of Saxon origin, who speak the same language as the English.

QUESTIONS ON THE GLOBES.

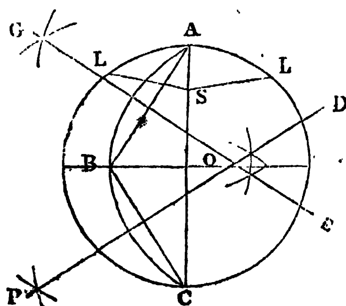
16. (As answered by H. W. W— —.)

Rectify the globe to the latitude of the given place; find the sun's place in the ecliptic, bring the place to the brazen meridian, and set the hour circle to twelve o'clock; then turn the sun's place to the eastern side of the horizon, and that will give you the time he rises. Bring the sun's place to the western side of the horizon, and that will give you the time he sets. The period between the time he rises and the time he sets will give you the length of the day.

17. (As answered by J. D———.)

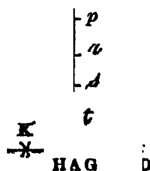
Because all the meridians of longitude meet in a point at the poles, and thus their distances from each other decrease as they get nearer to the poles.

18. (As answered by F. V. I— —.)



The greatest difficulty in drawing a map of the world, is to find the centre of each meridian of longitude, and the centre of each parallel of latitude. The method for finding these centres is the following: — suppose I have to find the meridian A B C, or the centre of a circle, whose circumference would pass through the points A, B and C. I join the points by the lines A B and B C; then bisect these by the perpendiculars D P and E G. The point O where these perpendiculars meet will be the centre sought. Then apply the compasses to the point O, and with the radius O B, sweep the circle or arc A B C. The same method may be used for the parallels of latitude. The centre of the parallel of latitude, L S L,′ would be found by joining the points L, S and L′ by the right lines L S and S L′, and erecting perpendiculars upon each, etc.

19. (As answered by W. R———.)



First, draw the base line C D, and in the centre of the map erect the perpendicular A B. Then divide A B into as many equal parts as there are parallels of latitude, contained in the country of which you want to draw a map; find in the tables the length of a degree of longitude at the base of the map; and measure it on C D, from the same scale from which the divisions on A B were taken, and suppose it to be a. Then find the length of a degree at the top of the map, and work as upon the base, and suppose the length at the top to be b; make H G $= a$, so that H A $=$ A G. Then make $mn = b$, so that mB $=$ Bn; with the centre m and radius mG sweep the arc K; take the distance on this arc from H $= a$. Then with the radius nH and the centre G, sweep another arc S, and mark off the

20. Explain the phenomenon of the tides.

21. Why is the mean temperature of the north hemisphere greater than the southern?

22 Why does the length of the days change more slowly about the months of June and December, than at any other period of the year?

23 What is the cause of the polar currents of the ocean?

24. What are the physical features in a country to which great rivers owe their origin?

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distance from $n - b$, and so on to other points Divide A 3 into the number of degrees required, then through *oprst* draw lines parallel to the arcs *mns*, &c, and K H G, &c., at the top and bottom, and you have the parallels of latitude required. The lines of longitude are formed by joining the points at the top and bottom of the map.

20. (As answered by W R———.)

The tides are occasioned by the attraction of the sun and moon. The attraction of the sun and moon causes the water to rise upon those parts of the earth to which the sun or moon is vertical, or nearly so and as the earth turns from west to east on its axis, the tides have an apparent motion from east to west But while the water on that side of the earth next the sun or moon rises, there are also tides on the opposite side of the world, which is very remarkable, and may be accounted for as follows The sun or moon attracts the water that is near itself, and makes it lighter than the water on the other parts of the earth, so that the water on that part must be higher, to keep up the equilibrium Now the nearer a body is to the sun or moon, the greater will be the force of gravitation on that body, consequently, the attraction of the sun or moon will be stronger at the centre of the earth than it will be at the opposite side Thus the centre of the earth will be attracted towards the sun with a greater force than the water on the opposite side, hence the water will be left behind, while the centre of the earth is drawn towards the sun, and thus we have tides on the opposite sides of the earth at the same time. There are also spring and neap tides We have the former when the sun and moon are in the same straight line with the earth, whether on the same or opposite sides, because when they are on the same sides their attractions are united, and when they are on opposite sides each has a tendency to cause a tide to rise on the side next to itself, as well as on the opposite side And the neap tides happen when the sun and moon act at right angles to each other Thus we have spring tides when the moon is full and when she is new, and low tide when she is in her quadratures.

21 (As answered by W. A———.)

Because there is more water in the southern hemisphere. The water absorbs the sun's heat by evaporation, whilst the land reflects and radiates the heat, besides icebergs have been found at a much lower latitude in the Southern Ocean than in the Northern

22. (As answered by A D———)

Because in June the sun travels nearly parallel to the equator, on the north side for a short time, but after a few days he takes a more downward course, and in December he moves parallel to the equator to the south of it, before taking an upward course

23. (As answered by F. V. I———.)

The motion of the waters from the poles to the equator is caused by the great heat in the tropics, which constantly carries off a great quantity of water, by raising it into the air in the form of vapour This produces a considerable deficiency of water near the equator; and to preserve the equilibrium, the neighbouring waters flow on each side towards the equatorial regions. But while the heat of the sun causes the deficiency (if I may so call it) near the equator, the rays of the sun, at certain times of the year, are melting considerable quantities of ice in the polar regions, which produces a superabundance of waters, and this superabundant water is carried to fill up the vacuum at the equator, and to re-establish equilibrium by two currents from north and south. The centrifugal motion of the earth also assists in producing and modifying these results.

24. (As answered by J. G———.)

The length of country they have to traverse, the number of tributary streams they receive in their course, the extent of the basin, and the height and inclination of the mountains from which they flow.

EXAMINATION PAPERS.—GEOGRAPHY AND GLOBES.

First Division.

Highest Number unlimited.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission.														
		P——, J. W.	R——, W., Aged 16, Admitted 27 Jan. 1840.	G——, J., Aged 15, Admitted 27 Jan. 1840.	E——, W., Aged 14, Admitted 27 Jan. 1840.	C——, J. A.	R——, George, Aged 16, Admitted 1 August, 1840.	B——, W. M., Aged 17, Admitted 12 Feb. 1840.	F——, F. S., Aged 19, Admitted 25 June, 1840.	H——, W., Aged 19, Admitted 27 Jan. 1840.	B——, J., Aged 20, Admitted 30 July, 1840.	A——, S., Aged 19, Admitted 15 May, 1840.	W——, W., Aged 14, Admitted 6 Feb. 1840.	I——, F. V.	T——, J., Aged 13, Admitted Jan. 27 1840.	W——, W., Aged 25, Admitted 30 June, 1840.
1	3	3	3	3	3		3	3	3	3	3	3	3	3	3	3
2	3	4	4	4	4		3	4	4	4	2	4	4	4	4	4
3	3	6	7	5	5		3	6	5	5	3	3	5	3	6	6
4	4	6	6	6	6		3	6	5	6	3	3	6	3	6	5
5	4	10	8	6	8		4	10	7	6	10	10	10	8	9	5
6	6	3	4	4	4		..	4	6	5	..	7	6	6	6	6
7	6	40	6	14	..		..	15	18	6	..	..	24	14	20	5
8	4	..	6	10	6		4	6	..	5	10	6	12	3	8	8
9	4	..	7	8	8		..	7	8	7	4	8	8	8	8	7
10	4	..	5	6	6		..	6	6	..	..	8	8	..	6	..
11	3	..	4	4	4		..	4	5	..	..	5	4	..	5	..
12	3	..	3	5	6		3	3	4	..	3	3	8	..	5	..
13	{ 6 6 }	..	12	40	40	Absent.	..	20	..	..	..	40	..	..	..	..
14	3	..	..	5	..		..	..	..	3	5	..	5	..	5	4
15	3	..	..	4	..		..	..	..	..	5	..	6	..	5	4
16	3	..	4	4	..		..	4	3	4	3	..	..	4	5	3
17	3	..	4	5	..		..	3	3	..	4	..	..	5	..	..
18	5	..	6	6	..		..	..	3	..	4	..	..	8	..	..
19	5	..	7	..	..		..	..	8	..	4	..	..	..	..	..
20	4	..	10	5	..		..	6	6	4	5	8	..	7	..	..
21	4	..	4	4	..		..	6	..	3	2	..	..	..	..	..
22	3	..	4	3	..		..	3	3	3	..	..	..	..	..	..
23	4	..	4	..	..		..	3	..	3	3	5	6	5	..	..
24	4	..	5	4	..		..	4	3	3	2	..	..	3	..	..
Tot.	100	72	123	155	100		23	123	100	70	75	113	115	84	101	60

EXAMINATION PAPERS.—GEOGRAPHY AND GLOBES.

SECOND DIVISION.

Highest Number unlimited.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission.															
		C——, C., Aged 13, Admitted 27 Jan. 1840.	L——, W. M., Aged 17, Admitted 7 Feb. 1840.	H——, M., Aged 15, Admitted 7 April, 1840.	W——, H. W., Aged 14, Admitted 27 Jan. 1840.	A——, W., Aged 16, Admitted 21 March, 1840.	B——, R., Aged 15, Admitted 21 Feb. 1840.	D——, A., Aged 17, Admitted 28 Oct. 1840.	O——, T., Aged 18, Admitted 25 June, 1840.	D——, J., Aged 14, Admitted 26 June, 1840.	G——, W., Aged 22, Admitted 22 Nov. 1840.	P——, C., Aged 13, Admitted 21 Feb. 1840.	K——, George, Aged 17, Admitted 16 June, 1840.	S——, S., Aged 16, Admitted 5 August, 1840.	S——, J., Aged 25, Admitted 20 April, 1840.	C——, H., Aged 15, Admitted 1 Feb. 1840.	H——, W.
1	3	3	3		3	3	2	3	3	3	3	3	3		3	..	3
2	3	3	4		3	4	3	4	4	4	4	3	3		4	4	4
3	3	6	6		5	5	3	6	5	5	2	3	3		3	4	6
4	4	6	6		4	4	3	6	5	5	3	6	3		4	4	6
5	4	8	7		4	5	3	4	..	6	..	8	4		3	6	..
6	6	4	6		4	3	3	5	..	3	..	5	4		..	4	..
7	6	..	..		..	..	..	..	..	3	..	..	..		..	..	..
8	4	6	8		6	4	5	6	..	5	..	8	4		3	5	4
9	4	6	4		5	5	5	6	7	6	5	7	6		4	6	3
10	4	4	8		5	4	4	..	7	2	..	5	..		4	..	..
11	3	4	5		4	4	3	..	5	3	..	5	..		..	4	..
12	3	4	3	Sick.	4	3	3	4	5	3	4	3	..	Sick.	..	3	2
13	{ 6 6 }	32	16		..	6	..	..	20	14	..	32	12		..	10	..
14	3	..	6		4	..	3	4	..	3	..	..	..		..	..	..
15	3	..	5		..	..	4	4	..	4	..	..	..		..	..	..
16	3	..	4		3	4	4	3	..	3	..	..	..		3	..	..
17	3	..	3		2	4	3	3	..	3	..	..	..		..	..	..
18	5	..	..		..	3	..	..	..	4	..	..	..		..	..	..
19	5	..	..		..	3	..	..	..	..	..	..	..		..	..	..
20	4	4	..		6	4	..	4	..	..	..	..	..		..	..	..
21	4	..	4		2	3	..	3	..	3	..	..	..		..	..	..
22	3	4	3		3	3	..	7	..	3	..	..	..		..	..	..
23	4	..	5		8	4	..	..	..	3	..	..	..		..	..	..
24	4	..	..		3	..	..	2	..	1	..	..	..		2	..	..
Tot.	100	94	106		78	78	51	74	61	89	21	88	42		33	50	28

MUSICAL QUESTIONS, *proposed to both Classes.*

JOHN HULLAH, ESQ.

1. What is the difference between a *Diatonic* and a *Chromatic* scale?
2. In how many *modes* can a Diatonic scale be written?
3. Why are the terms *Major* and *Minor* applied to certain scales?
4. Describe the order in which the tones and semitones succeed each other in a major scale.
5. What is the difference in the order of tones and semitones in an *ascending* and *descending* minor scale?

6. Write (on a stave) with the proper sharps or flats to each individual note, the ascending scales of Re, Mi ♭, Mi ♮, and Fa major.

7. Write (in a similar manner) the ascending and descending scales of Sol, La, Si, and Do minor.

8. Write (on a stave) the signatures of the scales of Do, Re, Mi ♭, Mi ♮, Fa, Sol, La ♭, La ♮, and Si ♮, major.

9. What signatures do minor scales bear?

10. Of what major scales are Do, Re, Mi, Fa, Sol, and La, the relative minors?

11. Write (on a stave) the signatures of Do, Re, Mi, Fa, Sol, and La minor.

12. State *how many* and *what kinds* of each interval there are in the major scale.

13. State what intervals are formed by notes in *similar* positions, and which by notes in *dissimilar* positions on the stave.

14. Is the interval between these two notes [musical notation] a Diatonic or a Chromatic semitone?

15. Describe the difference between a *Chromatic* and a *Diatonic* semitone.

16. How is the *time* that a note will take in singing known?

17. How is the *sound* or *pitch of a note* known?

18. How are these two notes [musical notation] known to be Sol and Do, and not Si and Mi?

19. How many clefs are there, and what are they called?

20. How is the "time" of a piece of music expressed?

21. What does each bar of a composition marked $\frac{9}{8}$ contain?

22. What does each bar of a composition marked $\frac{3}{4}$ contain?

23. What is the effect of a dot *after* a note?

24. How many quavers can be sung in the time of a dotted minim?

25. How many crotchets can be sung in the time of a dotted semibreve?

26. What is the effect of a dot *over* a note?

27. What is the effect of a *dash* over a note?

28. What is this character ⁀ called, and what is its effect when placed over several notes, different in name and pitch?

29. What is the same character called, and what is its effect, when placed over two notes of the same name and pitch?

EXAMINATION PAPERS.—MUSIC.

Number of the Questions.	Medium Value of the Questions.	Name, Age, and Date of Admission.												
		E——, W., Aged 14, Admitted 27 Jan. 1840.	C——, C., Aged 13, Admitted 27 Jan. 1840.	A——, S., Aged 19. Admitted 15 May, 1840.	S——, S., Aged 16, Admitted 5 August, 1840.	A——, W., Aged 16, Admitted 21 March, 1840.	W——, H. W., Aged 14, Admitted 27 Jan. 1840.	K——, George, Aged 17. Admitted 16 June, 1840.	B——, J., Aged 20, Admitted 30 July, 1840.	W——, W., Aged 25, Admitted 30 June, 1840.	D——, J., Aged 14, Admitted 26 June, 1840.	G——, W., Aged 22, Admitted 22 Nov. 1840.	W——, W., Aged 14, Admitted 6 Feb. 1840.	G——, J., Aged 15, Admitted 27 Jan. 1840.
1	4	12	3	1	2	..	2	4	2	4	2	2	4	2
2	3	3	3	3	3	..	3	3	3	3	3	3	3	3
3	5	..	..	5	..	..	..	3	..	5	..	..	..	..
4	3	4	3	3	4	1	4	..	3	3	4	2	3	2
5	6	6	6	6	..	..	6	..	3	6	6	..	6	6
6	4	4	4	4	..	4	4	..	3	4	4	..	4	4
7	6	6	4	6	..	6	6	..	6	4	..	..	6	..
8	4	4	4	4	..	4	5	..	4	4	..	..	4	..
9	3	3	3	3	..	3	3	..	3	3	3	..	3	3
10	4	4	4	5	..	..	4	..	4	4	..	..	4	4
11	5	5	..	5	..	5	5	..	4	5	..	..	5	..
12	6	..	..	4	..	..	..	..	..	..	..	..	..	..
13	3	..	..	3	..	..	..	..	..	..	..	..	..	..
14	4	4	4	4	..	4	3	..	4	4	4	..	4	..
15	4	2	..	5	..	4	2	..	..	2	2	..	5	..
16	3	2	3	3	3	3	..	3	3	..	3	3	3	3
17	3	3	3	5	3	3	3	3	3	3	3	3	4	3
18	3	2	..	3	3	..	3	4	4	3	3	3	5	3
19	3	2	..	..	4	2	2	2	3	2	4	2	5	2
20	3	4	..	4	4	..	3	3	3	3	2	3	3	4
21	4	4	5	..	4	4	5	4	..	5	4	5	1	..
22	4	4	4	4	4	4	4	4	4	4	4	4	4	..
23	2	2	2	2	2	2	3	2	2	3	2	3	2	2
24	3	4	3	3	3	3	3	3	3	3	3	4	3	3
25	3	3	3	3	3	3	3	3	3	3	3	3	3	3
26	2	2	4	2	3	1	2	..	2	2	3	..	2	2
27	2	2	3	2	2	2	2	..	2	..	2	..	2	..
28	3	5	3	3	3	2	4	3	2	3	3	3	4	3
29	3	3	2	3	3	1	3	..	4	3	3	..	3	2
Totals	105	99	73	98	53	61	87	44	77	88	70	43	95	54

EXAMINATION PAPERS.—MUSIC.

Number of the Questions.	Name, Age, and Date of Admission.												
	P——, J. W.	H——, W. Aged 19, Admitted 27 Jan. 1840.	I——, F. V.	D——, A., Aged 17, Admitted 28 Oct. 1840.	R——, G., Aged 16, Admitted 1 August, 1840.	F——, F. S., Aged 19, Admitted 25 June 1840.	O——, T., Aged 18, Admitted 25 June, 1840.	C——, H., Aged 15, Admitted 1 Feb. 1840.	P——, C., Aged 13, Admitted 21 Feb. 1840.	S——, J., Aged 25, Admitted 20 April, 1840.	T——, J., Aged 13, Admitted 27 Jan. 1840.	R——, W., Aged 16, Admitted 27 Jan. 1840.	H——, M., Aged 15, Admitted 7 April, 1840.
1	..	2	2	2	..	..	2	2	2	2	..	6	2
2	5	3	4	3	3	2	3	3	3	3	3	3	3
3	3	..	..	..	..	..	..	..	3	..	4	7	..
4	4	3	3	4	3	2	3	3	5	3	4	3	3
5	6	6	4	4	..	6	3	6	6	5	9	6	6
6	4	4	4	..	..	3	4	3	4	5	4	4	4
7	6	6	5	..	..	5	4	4	..	3	6	6	6
8	4	..	4	..	2	5	3	3	2	3	5	3	3
9	3	..	3	..	..	3	3	3	3	..	3	3	3
10	4	..	5	..	..	..	..	6	5	..	4	4	6
11	5	4	5	..	..	4	..	..	4	..	5	4	3
12	..	..	..	..	..	..	..	..	..	..	10	..	..
13	..	..	..	..	..	..	..	2	..	..	3	4	..
14	3	4	4	..	..	3	4	4	4	2	4	4	2
15	2	5	4	..	..	4	3	..	6	2	5	6	4
16	..	3	3	5	3	3	1	3	3	..	3	3	3
17	4	3	3	3	3	3	3	3	3	3	3	3	3
18	3	2	3	2	4	3	4	..	3	2	4	6	3
19	2	3	..	2	3	2	2	..	2	2	2	3	..
20	3	2	3	3	4	3	5	2	3	4	5	1	1
21	5	..	5	4	4	4	4	4	4	5	4	6	2
22	4	4	4	4	4	6	4	4	4	4	4	4	4
23	3	2	2	3	2	2	1	2	2	2	2	2	2
24	3	3	3	3	5	3	3	3	3	3	3	3	3
25	3	3	3	..	3	6	3.	3	3	3	3	3	3
26	1	2	..	1	..	2	..	1	..	..	1	2	2
27	1	3	2	..	2	2	..	..	3	1	1	2	3
28	3	3	3	2	3	4	..	3	2	2	4	4	2
29	3	4	3	..	3	4	2	3	2	2	5	2	3
Totals .	87	74	84	45	51	84	64	70	84	61	113	107	79

The preceding notes contain a few examples of the manner in which the questions have been answered, one being selected for each question, which (in conjunction with the numerical statements contained in the Tables) may serve as a standard of comparison by which the merit of the rest of the replies may be ascertained. It is a source of pleasure to us that a Maltese, confided to our care by the Maltese Government, notwithstanding the obstacles created by the want of a perfect knowledge of the language, occupies such a position in this examination as to justify

our confidence in his success, as the Teacher of a model school in Malta, which is his destination.

The questions and answers afford better evidence than anything which we can say of the intelligent and persevering attention which Mr. Tate and Mr. Horne have paid to their duties. They have earned the reward of the affection and respect of their pupils, and if our own tribute of esteem can add anything to the satisfaction derivable from that source it has been freely accorded.

We are somewhat apprehensive that these questions may lead to erroneous opinions of our views. We are fully aware that all such tests must give a very imperfect idea of the real condition of a school, and in fact, from being necessarily confined to intellectual displays, omit all reference to what we have always considered to be the most essential, as it is the most difficult object of our endeavours, the formation of moral and religious characters. The progress that may have been made toward this latter object is incapable, as in the former, of being shown by written questions. We can only then solicit credit for our intentions in repeating with all earnestness, that we hold the end of all these intellectual demonstrations to be infinitely subordinate to the cultivation of the heart and feelings. We have no wish to send forth simply clever teachers; we believe, on the contrary, that the vice of several of the German normal institutions, which we have examined, has been the too great attention paid to instruction as distinct from education. The Swiss schools appeared to us to be mostly free from this defect, and to them we have chiefly resorted as models for what we have done.

It may also be objected to these questions, that some of them refer to subjects different from or beyond what it may be desirable or possible to teach in many schools. We admit the correctness of this statement, but deny the inference that some may attempt to draw from it derogatory to the utility of such studies for the purpose we have in view. The schoolmaster, whose knowledge is strictly confined to what he has to impart, will frequently be at a loss, in attempting to explain many points that occur in his lessons, and puzzled with questions from the more intelligent pupils, whose unsatisfied inquiries will quickly generate a disrespect for their instructor. It is impossible to know or to teach many of even the lowest branches of knowledge thoroughly, without some acquaintance with the theories and higher generalizations on which those inferior departments depend. But on this point we would refer to a high authority, M. Guizot, with whose opinion on this subject, as well as in the following description of what a teacher ought to be, we beg to add our unqualified concurrence: —"A good schoolmaster ought to be a man who knows much more than he is called upon to teach, that he may teach with

intelligence and with taste; who is to live in a humble sphere, and yet to have a noble and elevated mind, that he may preserve that dignity of sentiment and of deportment, without which he will never obtain the respect and confidence of families; who possesses a rare mixture of gentleness and firmness; for, inferior though he be in station to many individuals in the parish, he ought to be the obsequious servant of none; a man not ignorant of his rights, but thinking much more of his duties; showing to all a good example, and serving to all as a counsellor; not given to change his condition, but satisfied with his situation, because it gives him the power of doing good; and who has made up his mind to live and to die in the service of primary instruction, which to him is the service of God and his fellow-creatures. To rear masters approaching to such a model is a difficult task; and yet we must succeed in it, or else we have done nothing for elementary instruction."

The questions for this quarterly examination have been chiefly selected by the Tutors. We do not propose that this course shall be pursued in the questions employed in the examination for the certificate of *Candidate*, or *Scholar*, or *Master*. We are of opinion that such institutions as this training school (the further management of which we hope to superintend in entire subordination to your wishes) should be placed under the inspection of that department of the executive government which is charged with the promotion of elementary education. The humble effort which we have made to place in your hands the means of providing schoolmasters for the workhouses, and especially for the district schools for pauper children, has not, we trust, been conducted inconsistently with the public interests; but we are anxious to afford the public the fullest warrant for confidence in the future management of this school, and we know no way of accomplishing this object so fully as by soliciting the periodical examination of Her Majesty's Inspectors of Schools, which we trust the Committee of Council on Education will allow. In the *quarterly examinations* of the training school, we hope for the assistance of one of Her Majesty's Inspectors, and we trust that, upon application from you, the Committee of Council will consent to associate one or more of their Inspectors with one of your own body, in selecting the questions for the *annual examination*, by which the certificates will be awarded; in determining the merit of the several replies; and in selecting the individuals who may be entitled to certificates.

In order that the selection of questions may have the necessary relation to the studies of the year, we propose to furnish the *examiners* with the weekly and quarterly examination papers of the school, from which papers they will readily ascertain the range of the acquirements of the pupils in the several classes; but

it will be expedient that every question shall emanate only from the examiners at the annual examination for certificates.

We are desirous that some standard of attainment should be fixed for entrance upon the preparatory course, and we wish to refer the examination papers (employed to ascertain the acquirements of the pupils on their entrance) to the approval of the Committee of Council on Education; and that the replies being prepared by pupils under the eye of an Inspector, at the end of a short probationary period, should be approved by their Lordships before each pupil is finally entered for the preparatory course on the books of the school.

We trust that, in this way, security will be afforded that any funds which may be devoted to the maintenance of this training school will not be applied in any way inconsistently with the interests of the public.

We regard these securities to be indispensable to the permanent prosperity of such institutions. By the examination of the pupils at their entrance, and the submission of the examination papers, (prepared in the presence of an Inspector at the end of a short probationary period) we intend to exclude favouritism in the selection of pupils, and the interference of partial interests in burthening the school with unqualified students.

By the continual inspection of the school by able, independent, and impartial men, we hope to secure the most useful stimulus to the exertions of the Tutors and pupils; to provide against self-deception on their part as to the condition of the school; and, above all, to afford the public the only sufficient security against the impressions derived from appearances skilfully dramatized to prevent the disclosure of defects.

We are especially anxious that the certificates should be awarded by persons not directly interested in the management of the school, in order that a conviction of impartiality may prevail among the scholars—that the certificates may have more than the ordinary value of such documents, and that the public may have only a legitimate, and in all respects a well-founded, confidence in the results of the training.

We should much rejoice if the results of these preparatory steps towards the foundation of a training school were deemed sufficiently auspicious to warrant the confidence of the Commission and of the Government, so far as to procure for the future expenses of the school assistance from the public funds. In that case we feel that the Government would be entitled to require that no Tutor or Professor should be appointed in the school without their approval; that their sanction should be necessary to the dismissal of any Tutor or Professor; and further that, on the report of their Inspectors, they should be entitled to proceed to remove any Tutor or Professor from his office.

We are also of opinion that the training school would not be entitled to support, in any considerable degree, from the public funds, unless the estimates for the school were annually submitted for the approval of the Committee of Council on Education, and the accounts annually audited by one of their Lordships' Inspectors.

The expenses of the training school during the preparatory course have been cheerfully borne by ourselves, with the exception of those payments which have been made with individual pupils and students, and the entirely unsolicited aid of three or four of our personal friends. We have not presumed to think that we were warranted in expecting confidence in plans which had not hitherto been put forth in this country, until we could place before you at least a partial development of our views. We have therefore avoided soliciting assistance from any one, and, to all inquiries on this subject, we have deemed it proper to suggest, that the personal confidence of friends would not ensure the permanent prosperity of a training school, which could only flourish by deserving and obtaining the confidence of the public. Such remarks have not prevented Mr. Samuel Jones Lloyd and Mr. George Cornewall Lewis from urging us to permit them to contribute each 100*l*. to the expenses of this year. We have accepted these offers. The Bishop of Durham has not been content with the usual payment for the pupil he has placed in the training school, but his Lordship has requested us to accept a more liberal rate of remuneration. Mr. George Norman, of Bromley, has also sustained the charge of a pupil, whom, however, he has not selected. The Earl of Chichester added ten pounds to the sum paid with a boy whom he recommended.

The efficiency of the school during the course of instruction in the ensuing year can only be maintained by a considerable increase of expense. The number of the pupils and students will probably increase to sixty in the early part of the spring. The attention of the Tutors will necessarily be so much occupied with the preparatory studies of those who then enter the school that an additional Tutor will be indispensable. Certain of the courses of instruction of this year cannot be pursued without the assistance of Professors who will attend from day to day. We have already secured the attendance of Mr. Hughes, who lectures on the geography of commerce and industry, and of an artist to assist in the instruction in drawing and perspective. We regret to say that Mr. Hullah's services have been given gratuitously, and with a zeal and disinterestedness which would, we fear, place it beyond our power adequately to express the value which we attach to his admirable lessons on vocal music. We have further incurred a part of the charge of the master of the village school. We propose to appoint a well-conducted, intelligent, and skilful

gardener to superintend the instruction in horticulture, which will now receive increased attention. The charge for the rent may soon increase by our encountering the necessity of occupying the entire house, with the exception of two apartments, which we each intend to reserve in the establishment, where we may confer with the Tutors. The further expenses of furniture required by the increase of the number of pupils and Tutors, the additional books, apparatus, and certain contemplated alterations which it will be impossible to postpone beyond the spring, will raise the expenses of the ensuing year (after all the payments for individual scholars are deducted) to a balance of 2000*l*. at least.

We are prepared to sustain this expense, if it be necessary that the training school should be carried through another stage of its development before it deserves the public confidence. In fact, we consider ourselves bound to do so should we obtain no assistance, as we have entered into engagements with the pupils which we must fulfil at whatever cost to ourselves. Considerable inquiry and observation have impressed us with the views on which the training school is founded, and we have been desirous to make a practical trial of the principles and expedients, which the experience of the Protestant States of Europe has sanctioned by a concurrent testimony. It would be grateful to us to receive an early assurance of confidence in the plans and principles which we have, with as much unreserve as is consistent with the limits of this report, freely set before you; but we have not entered on our present undertaking without expecting that a sacrifice would be required of us, before the work was in a condition to obtain that confidence which we trust will not be refused.

We also trust that the exposition of the principles by which we have been guided will not be misconceived, as evincing so unwarrantable a confidence in our opinions as to lead us to indulge in dogmatism. We conceive we may sincerely entertain them, and endeavour to promote their diffusion, without any undue confidence in our own judgment, or want of respect for the opinions of others.

You will naturally expect that this free disclosure of our views and proceedings in relation to the training school should be terminated by an account of the expenses we have incurred to the termination of the year 1840. We think it right to lay the balance-sheet of the expenses and receipts of the school, without reserve, before you. We have been careful to take receipts for all the payments we have made, and as we regard ourselves as labouring at the foundations of a public institution, in which our experience may be of some value to others, we shall feel obliged if you will direct the accounts to be audited.

We have endeavoured, by a scrupulous economy in every department, to render the expenses of the school as low as is consistent with its efficiency, and we have accordingly foregone many

convenient arrangements not absolutely required, but which it would have been desirable to make.

Some expenses might have been reduced, had not the demands of our public duties rendered it impossible to give constant superintendence to certain details.

JAMES PHILLIPS KAY AND EDWARD CARLETON TUFNELL IN ACCOUNT WITH THE TRAINING SCHOOL, BATTERSEA.

Drs.	£.	s.	d.	31st December, 1840. *Crs.*	£.	s.	d.
To Cash from G. W. Norman, Esq	25	0	0	By furnishing and repairs	444	6	11½
" Lord Chichester . .	10	0	0	Clothing	91	12	1
" S. Jones Loyd, Esq	100	0	0	Books, stationery, &c.	76	15	7½
" G. C. Lewis, Esq.	100	0	0	House account, viz., provisions, wages, and petty cash account	564	7	4
" Landlord repairs.	200	0	0	House account, viz., servants' wages	17		
" "	50	0	0	Garden account	34		
" Sundries sold . .	14	13	3	Rent and taxes (deducting Dr. Kay's rent).	103	5	6
" Mr. Philbrick . .	14	0	0	Alterations and repairs (deducting Dr. Kay's charge).	340	6	4
" for Students and Pupils	271	14	2	Bad bank-note	5	0	0
Amount owing for ditto ditto.	196	19	4	Salaries	154	9	2
Balance	1283	11	10	Mr. Senf	70	0	0
				Bills unpaid.	343	19	8
				Salaries due	20	10	10
	2265	18	7	£	2265	18	17

The balance of expenses for which we find we have to provide on the 1st January, 1841, is £1283, which we have accordingly devoted to the establishment of this school. This sum arises to a large extent from the expenses incurred in furnishing, repairs, and alterations. The rest is attributable to salaries and the charge of clothing and maintaining the boys selected from the best schools for poor children, and educated at our expense.

The expenses of Dr. Kay's own private establishment are of course all borne by himself, and his arrangements are in all respects separate.

We have the honour to be,

Gentlemen,

Your obedient servants,

JAMES PHILLIPS KAY.
EDWARD CARLETON TUFNELL.

To the Poor Law Commissioners, Somerset House.

COURSE OF INSTRUCTION pursued in the

		Religion and Morals.	German Language.	French Language.	Arithmetic.	Geometry.	History.
1st Class and 1st School-year.	1st Half-year.	Geography of Palestine, Jewish Archæology, History of the Christian Church.	Grammar, exercises in reading and recitations, composition.	Exercises in reading, and translation of easy pieces of French into German, introduction to the grammar, and etymology.	Elementary rules of arithmetic, Vulgar and Decimal Fractions.	The doctrine of parallel lines, properties of triangles, similar triangles.	History from the beginning of the world to the subjection of Greece to the Romans.
	2nd Half-year.	Faith and morals, as founded on revelation.	Grammar, continuation of exercises in reading and recitations, composition of letters, and speeches.	Continuation of the above beginning of the translation of German into French: grammar: vocabulary.	Proportion: mental arithmetic.	Measurement of triangles, and straight line figures, planimetry.	From the building of Rome to the Westphalian Peace.
2nd Class and 2nd School-year.	1st Half-year.	Lectures on the Bible, with questions.	Etymology, and logical exercises, recitations, and composition.	Continued exercises of reading and translation into German: grammar: syntax: translation from German into French: speaking.	Continuation of exercises in the elementary rules.	Further exposition of the properties of triangles, and of straight line figures.	History of Switzerland from the beginning to the Westphalian Peace.
	2nd Half-year.	Lectures on the Bible, with practical illustrations and references.	Repetitions of the more difficult parts of grammar, more extended compositions, laws of poetry.	Continuation of exercises in reading and translation: conclusion of syntax: recitations of easy pieces.	Continuation of exercises in Proportion: Simple Equations.	The circle: elements of stereometry: easy questions in practical geometry.	History of Switzerland as it bears on that of the rest of the world to the present period.
3rd Class and 3rd School-year.	1st Half-year.	Deeper and more abstruse points of doctrine, with scriptural proofs and practical illustrations.	The more important peculiarities of the German language, verbal expositions of the written exercises.	Further expositions of grammar, more difficult translations from and into French and German respectively: composition.	More difficult applications of the preceding rules.	Continuation of planimetry: plain and solid angles: projection of straight line figures: questions in the above subjects.	General history from 1389 to 1815.
	2nd Half-year.	Continuation of the above.	View of German literature: poetical exercises.	Continuation of the above short sketch of French literature.	Quadratic and Cubic Equations: Logarithms, Properties of Numbers: Progression.	Polygonal figures: elements of trigonometry: practical geometry: projection of bodies with straight or curved surfaces: sections.	General history from 1815 to the present time.

Normal Seminary at Zurich, Switzerland.

Geography.	Natural History.	Physics.	Singing.	Art of Writing.	Drawing.	Art of Teaching.
Introductory explanations, the ocean and continents, with their respective divisions.	General introduction to natural history, description of elementary bodies, general characteristics of minerals.	..	Elementary exercises of the voice, easy choral exercises.	Exercises in German and Roman character, in legal writing, and in black letter writing, music, and stenography.	Sketches from objects placed before the pupil, and from nature; special exercises in shading.	..
Special geography of Europe	Unmetallic minerals, metals, mountains, introduction to botany.	..	Melody, religious hymns and choral singing.			..
The most important points of mathematical and physical geography.	Systems of botany, description of plants, special information on the plants known to the pupils.	The common phenomena arising from the various properties of differently constituted bodies.	Further exercises in Sol Fa, also with words, exercises in solo singing and choral singing.			Introduction to psychology, methods of instruction.
Geography of Asia, Africa, America, and Australia.	Introduction to zoology: classification and descriptions, introduction to the natural history of man.	Acoustics, optics, heat, magnetism, electricity.	Continuation of the above, special exposition of the art of teaching music.			Further exposition of methods of instruction, and of the cantonal laws and regulations relative to schools, practical teaching in the primary school.
More extended expositions of mathematical and physical geography.	Natural history of man: further expositions of the natural history of the lower animals	Further exposition of the above subjects.	Continuation of the above.	..	..	Fundamental principles of the science of teaching.
Special geography of Asia, Africa, America, and Australia.	Introduction to geology: fossils.	Further exposition of the above subjects.	Continuation of the above.	..	..	Practical teaching in the secondary school.

COURSE of INSTRUCTION pursued at the Normal Seminary in the Canton of Thurgovia, Switzerland, under the superintendence of M. Vehrli, in the Summer Half-year of 1839.

HOURS.	CLASS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.	SUNDAY.
5 to 7	First	Out-door labour.	Out-door labour.	Art of teaching.	Out-door labour.	Out-door labour.	Art of teaching.	Attending divine service, sacred music, teaching in Sunday school.
	Second.	Out-door labour.	Out-door labour.	Out-door labour.	Art of teaching.	Out-door labour.	Out-door labour.	
7 to 8	..	Breakfast.	Breakfast.	Breakfast.	Breakfast.	Breakfast.	Breakfast.	
8 to 9	First	Natural history.	Biblical history.	Profane history.	Natural history.	Biblical history.	Profane history.	
	Second.	Profane history.	Biblical history.	Management of land	Profane history.	Biblical history.	Management of land.	
9 to 10	First	Grammar.	Grammar.	Natural history.	Grammar.	Grammar.	Natural history.	
	Second.	Geometry.	Arithmetic.	Grammar.	Geometry.	Arithmetic.	Grammar.	
10 to 11	First	Singing.	Singing.	Grammar.	Singing.	Singing.	Grammar.	
	Second.	Grammar.	Grammar.	Geometry.	Grammar.	Grammar.	Geometry.	
11 to 12	First	Arithmetic.	Geometry.	Geometry.	Arithmetic.	Geometry.	Arithmetic.	
	Second.	Natural history.	Natural history.	Art of teaching.	Natural history.	Natural history.	Art of teaching.	
12 to 1½	..	Dinner and gymnastic exercises.	Dinner and gymnastic exercises.	Dinner and gymnastic exercises.	Dinner and gymnastic exercises.	Dinner and gymnastic exercises.	Dinner and gymnastic exercises.	
1½ to 3	First	Singing.	Writing.	Drawing.	Singing.	Writing.	Drawing.	
	Second.	Writing.	Drawing.	Violin.	Drawing.	Singing.	. . .	
3 to 4	First	Geography.	Arithmetic.	Arithmetic.	Geography.	Arithmetic.	Writing.	
	Second.	Arithmetic.	Geography.	Natural history.	Arithmetic.	Geography.	. . .	
4 to 5	First	Geometry.	Reading.	Repetitions.	Geometry.	Reading.	. . .	
	Second.	Reading.	Geometry.	Arithmetic.	Reading.	Geometry.	. . .	
5 to 6	..	Supper.	Supper.	Supper.	Supper.	Supper.	Supper.	
6 to 9	..	Garden-work, house-work, conversation.	Garden-work, house-work, conversation.	Garden-work, house-work, conversation.	Garden-work, house-work, conversation.	Garden-work. house-work, conversation.	Garden-work, house-work, conversation.	

COURSE of INSTRUCTION pursued in the two Classes at the Normal Seminary, Carlsruhe, in the Summer half-year 1839.

HOURS.	CLASSES.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
7 to 8 . . .	First . .	New Testament.	Old Testament.	Geometry.	New Testament.	Old Testament.	New Testament.
	Second. .	New Testament.	Old Testament.	Catechism.	New Testament.	Old Testament.	New Testament.
8 to 9 . . .	First . .	Singing.	Geography.	Organ.	Geography.	Singing.	Natural history.
	Second. .	Profane history.	Organ.	Singing.	Organ.	Geography.	Organ.
9 to 10 . . .	First . .	Organ.	Composition.	Singing.	Singing.	Arithmetic.	Composition.
	Second. .	Arithmetic.	Singing.	Geography.	Singing.	Singing.	Organ.
10 to 11. . .	First . .	Grammar.	Grammar.	Singing.	Grammar.	Singing.	Grammar.
	Second. .	Singing.	Geometry.	Grammar.	Profane history.	Grammar.	Arithmetic.
11 to 12. . .	First . .	Singing and organ	Organ.	Natural history.	Organ.	Organ.	Natural history.
	Second. .	Natural history.	Natural philosophy.	Singing.	Natural history.	Natural philosophy.	Singing.
2 to 3. . . .	First . .	Writing.	Agriculture.	. .	Writing.	Agriculture.	Organ.
	Second. .	Drawing.	Arithmetic.	. .	Drawing.	Arithmetic.	Art of teaching deaf and dumb.
3 to 4 . . .	First . .	Drawing.	Geometry.	. .	Drawing.	Geometry.	Composition.
	Second. .	Writing.	Historical composition.	. .	Writing.	Composition.	. .
4 to 5 . . .	First . .	Geometry.	Organ.	. .	Organ.	. .	Singing
	Second. .	Organ.	. .	. .	. .	Geometry.	Singing.
5 to 6 . . .	First . .	Piano and organ.	Historical composition.	. .	Piano and organ	. .	. .
	Second. .	. .	Organ.	. .	Piano and organ.	Organ.	. .

Course of Instruction in the Normal School of the Canton of Vaud, at Lausanne, during the Winter of 1838—1839.

Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
8	Prayer, reading, and religious instruction (all).	As on Monday.	Idem.	Idem.	Idem.	Idem.
9	The art of teaching (all).	General history (all).	The art of teaching (all).	Use of globes, first and second classes.	Swiss history (all).	Instruction in law and in the duties of a citizen, 1, 2, 3.
10	Geometry, 1, 2. The means of improving the health and condition of the people.	Arithmetic, 1, 2. Theme, 3.	Theme, 1, 2. Arithmetic, 3.	Composition 1, 2. Mental arithmetic, 3.	Arithmetic, 1, 2. Theme, 3.	Theme, 1, 2. Arithmetic, 3.
11	Botany, 1, 2.	Writing, 1, 2, 3.	Chemistry, then Zoology 1, 2, 3.	Chemistry, then Zoology, 1, 2, 3.	Writing, 1, 2, 3.	Chemistry, &c. 1, 2, 3.
1	. .	. .	. .	. .	Exercises on the physical sciences, 1, 2.	Writing, 3.
2	Grammar, 1, 2, 3.	Drawing, 1, 2; reading, 3.	Grammar, 1, 2, 3.	Drawing, 3; mental arithmetic, 1, 2	Geometry, 3. Composition, 1, 2.	Geometry, 1, 2.
3	Gymnastics, 1, 2.	Drawing 1, 2.	Gymnastics, 3. Book-keeping, 1.	Drawing, 3; reading, 1, 2.	Pedagogical exercises in mathematics, 1, 2.	. .
4	Geography, 3.	Geography, 1, 2.	Reading, 1, 2. Geometry, 3.	Reading, 3.	Swiss geography, 1, 2, 3.	. .
5	. .	Geography, 3.	. .	Geography, 1, 2.	. .	. .
7	. .	Singing, 3.	Singing, 1, 2, 3.	Singing, 1, 2.	Singing, 1, 2, 3.	. .

N.B.—The figures denote the different classes. The figure 1 being attached to the most advanced class.

COURSE of INSTRUCTION in the Normal School of the Canton of Vaud at Lausanne, in the Summer of 1838.

HOURS	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
5	. . .	Book-keeping (teachers).* Writing (pupils).†	Geography (teachers)	Geography (teachers). Writing (pupils).	. . .	On the method of writing (teachers).
6	Prayer, reading, and religious instruction.	As on Monday.	As on Monday.	As on Monday.	As on Monday.	As on Monday.
7	Composition (older pupils). Arithmetic (younger pupils).	Arithmetic (teachers). A theme (pupils).	Composition (teachers). Geometry (pupils).	Arithmetic (teachers). A theme (pupils).	Composition (teachers). Geometry (pupils).	Arithmetic (teachers). Composition (young pupils).
8	. . .	. . .	. . .	. . .	. . .	. . .
9	The art of teaching (all).	Use of the globes (all).	Art of teaching (all).	Instruction in the law and duties of a citizen (all).	Art of teaching (all).	Instruction in the law and in the duties of a citizen (all).
10	Geography (teachers). Mental arithmetic (pupils).	Grammar (teachers). Geography (pupils).	Geometry (teachers). Grammar (pupils).	Reading, with analysis of the grammar, structure, and meaning (all).	Grammar (teachers). Geography (pupils).	Geometry (teachers). Grammar (pupils).
11	Natural history (all).	Physics (pupils).	Natural history (all).	Natural history (all).	Pedagogical exercises on the physical sciences (pupils).	Reading (teachers). Arithmetic (older pupils).
2	A theme (teachers)	Drawing (teachers). Composition (young pupils).	A theme (teachers).	Drawing (pupils).	. . .	. . .
3	Gymnastics (pupils).	Drawing (teachers). Composition (young pupils).	Geography of Switzerland (teachers).	Drawing (pupils)	Gymnastics (pupils).	. . .
4	Reading (pupils).	Reading (all).	Singing (teachers). Arithmetic (pupils)	Reading (all).	Singing (teachers). Arithmetic (pupils).	Practical geometry (pupils).
5	Mental Arithmetic (teachers).	Singing (all).	Singing (pupils).	Singing (all).	Singing (pupils).	. . .

* Teachers are masters of elementary schools in attendance on the Normal School.

† Pupils are young men who have not had charge of elementary schools, but who are preparing for the duties of schoolmasters.

COURSE of INSTRUCTION pursued in the two Classes at the Normal Seminary in Eisleben, Prussia, in the Summer half-year of 1839.

HOURS.	CLASSES.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
7 to 8 . .	First . . .	Religious instruction.	Religious instruction.	Art of teaching.	Religious instruction.	Religious instruction.	Religious instruction.
	Second . .	Religious instruction.	Profane history.	Logic.	Religious instruction.	Profane history.	Logic or sacred history.
8 to 9 . .	First . . .	Profane history.	Logic.	Geography.	Profane history.	Logic or Prussian history.	Geography.
	Second . .	Arithmetic.	Thorough bass and organ.	Geometry.	Grammar.	Arithmetic.	Geometry.
9 to 10 . .	First . . .	Reading.	Organ.	Thorough bass.	Art of teaching.	Reading.	Arithmetic.
	Second . .	Thorough bass and organ.	Religious instruction.	Drawing.	Writing.	Religious instruction.	Thorough bass and organ.
10 to 11 . .	First . . .	Arithmetic.	Grammar.	Violin.	Arithmetic.	Grammar.	Organ.
	Second . .	Grammar.	Singing.	Drawing.	Thorough bass and organ.	Singing.	Writing.
1 to 2 . .	First . . .	Art of teaching.	Natural Philosophy.	. .	Examination.	Natural history.	. .
	Second . .	Natural philosophy.	Reading.	. .	Natural philosophy.	Reading.	. .
2 to 3 . .	First . . .	Geometry.	Drawing.	. .	Geometry.	Writing.	. .
	Second . .	Composition.	Geography.	. .	Composition.	Geography.	. .
3 to 4 . .	First . . .	Thorough bass.	Drawing.	. .	Violin.	Writing.	. .
	Second . .	. .	Violin.	. .	. .	Violin.	. .
4 to 5 . .	First . . .	Organ.	. .	. .	Organ.	. .	. .

NOTE.—Three hours of singing, and one hour of instruction in the art of teaching, are also weekly given at indeterminate times.

COURSE of INSTRUCTION pursued by the two Classes at the Normal Seminary at Schluchtern, Hesse Cassel.

HOURS.	CLASSES.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
7 to 8 . .	First . . .	Attend model school.	Attend model school.	Attend model school.	Attend model school.	Attend model school.	Attend model school.
	Second . .	Life of Christ.	Life of Christ.	Catechism.	Life of Christ.	Life of Christ.	Catechism.
8 to 9 . .	First . . .	Catechism.	Catechism.	Art of questioning	Catechism.	Catechism.	Art of questioning
	Second . .	Bible explanations.	Arithmetic.	Arithmetic.	Bible explanations.	Arithmetic.	Arithmetic.
9 to 10 . .	First . . .	Attend model school, or practise organ.	Attend model school, or practise organ.	Attend model school, or practise organ.	Attend model school, or practise organ.	Attend model school, or practise organ.	Attend model school, or practise organ.
	Second . .	Composition.	Thorough bass.	Geography.	Composition.	Singing.	Geography.
10 to 11 . .	First . . .	Natural philosophy.	Arithmetic.	Catechetical exercises.	Natural philosophy.	Composition.	Arithmetic.
	Second . .	Reading.	Grammar.	Geometry.	Grammar.	Geometry.	Grammar.
11 to 12 . .	First . . .	Singing.	Violin.	Thorough bass.	Singing.	Violin.	Singing.
	Second . .			Writing.			Writing.
1 to 2 . .	First . . .	Attend model school or practise organ.	Attend model school, or practise organ.	Attend model school, or practise organ.	Attend model school, or practise organ.	Attend model school, or practise organ.	Attend model school, or practise organ.
	Second . .	Piano.	Drawing.	Botany.	Piano.	Drawing.	Botany.
2 to 3 . .	First . . .	Botany.	Art of teaching writing.	Attend model school.	Botany.	Attend model school.	Geography.
	Second . .	Piano.	Piano.	Biblical history.	Piano.	Piano.	Singing.
3 to 4 . .	First . . .	Reading and explanation of German classics.	German history.	Geography.	Reading and explanation of German classics.	German history.	. .
	Second . .	Piano.	Piano.	Reading.	Piano.	Piano.	. .
5 to 6 . .	First . . .	Religious instruction.	Art of teaching.	Botanical excursions.	Religious instruction.	Art of teaching.	Open air exercise.
	Second . .					Open air exercise.	
6 to 7 . .	First . . .	Open air exercise.	Open air exercise.		Open air exercise.		
	Second . .						

Course of Instruction pursued in the Two Classes at the Fletcher Normal Seminary in Dresden. The course is of four years' duration, fresh pupils being received and departing every two years. Those that come in the fifth half-year would be placed in the second class of the following scheme, and at the end of the eighth half-year in the first class. Those entering in the first half-year would be in the second class till the fifth half-year.

Subjects of Instruction.	1st Half-year.		2d Half year.		3d Half-year.		4th Half year.		5th Half-year.		6th Half-year.		7th Half-year.		8th Half-year.	
	1st class.	2d class.	1st class.	2d class	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.	1st class	2d class.
1. Biblical Knowledge		4 h.	.	.	.	.	.	.		4 h.	.	.	.	.	.	.
2. Biblical History		4 h.		4 h.	.	.	.	.		4 h.		4 h.	.	.	.	.
3. Bible Explanation	2 h.		2 h.	2 h.	2 h.	2 h.	2 h. common to both.		2 h.		2 h.	2 h.	2 h.	2 h.	2 h. common to both	
4. Catechism	.	.	.	.	4 h. common to both.		4 h. common to both.		.	.	.	.	4 h. common to both.		4 h. common to both	
5. Art of Questioning	.	.	.	.	.	.		2 h.	.	.	.	.	.	.		2 h.
6. Catechetical Exercises	2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.	
7. Exercises in Thinking		2 h.	.	.	.	.	.	.		2 h.	.	.	.	.	.	.
8. Psychology and Art of Teaching.	.	.	.	.	2 h. common to both.		2 h. common to both		.	.	.	.	2 h. common to both.		2 h. common to both.	
9. School Discipline	.	.	.	.	.	.	2 h.		.	.	.	.	.	.	2 h.	
10. General History	.	.	.	.	.	.	.	.	.	.			.	.	.	.
11. German and Saxon History.	.	.	4 h. common to both		.	.	.	.	.	.	4 h. common to both.		.	.	.	.
12. Latin	.	.	.	.		3 h.	.	.	.	.	.	.		3 h.	.	.
13. Composition	2 h. common to both		2 h. common to both.		1 h. common to both.		1 h. common to both		2 h. common to both.		2 h. common to both.		1 h. common to both.		1 h. common to both	
14. Arithmetic		4 h		4 h.		4 h.		3 h.		4 h.		4 h.		4 h.		3 h.
15. Geography		3 h.		3 h.	.	.	.	.		3 h.		3 h.	.	.	.	.
16. Natural Philosophy	.	.	.	.	2 h. common to both		1 h. common to both.		.	.	.	.	.	.	.	.
17. Writing		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.
18. Violin	1 h.	1 h.	1 h.	2 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	2 h.	1 h.	1 h.	1 h.	1 h.
19. Singing	2 h.	2 h.	2 h. common to both.		2 h. common to both.		2 h. common to both		2 h.	2 h.	2 h. common to both.		2 h. common to both.		2 h. common to both.	
20. History of the Church	.	.	2 h.		2 h.				.	.	2 h.		2 h.			
21. Geometry	.	.	.	.			.	.	.	.	.	.			.	.
22. Grammar	1 h.	2 h.	1 h.	2 h.		3 h.		3 h.	1 h.	2 h.	1 h.	2 h.		3 h.		3 h.
23. Reading		2 h.		1 h.		2 h.		2 h.		2 h.		1 h.		2 h.		2 h.
24. Natural History	.	.	.	.	.	.	.	.	.	.	.	.	2 h. common to both.		1 h. common to both	
25. Drawing		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.
26. Thorough Bass	2 h.	1 h.	2 h.	2 h.	1 h.	2 h.	1 h.	2 h.	2 h.	1 h.	2 h.	2 h.	1 h.	2 h.	1 h.	2 h.
27. Organ	2 h.	2 h.	2 h.	2 h.	1 h.	2 h.	1 h.	2 h.	2 h.	2 h.	2 h.	2 h.	1 h.	2 h.	1 h.	2 h.
28. Piano	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.

Note.—h. stands for the hours devoted to each subject of instruction during the week.

COURSE of INSTRUCTION pursued in the Three Classes at the Normal Seminary, Esslingen, Wurtemburg, in the Summer Half-year of 1839.

HOURS.	CLASS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
6 to 7	First	Arithmetic.	Art of questioning.	Geometry.	Art of questioning.	Arithmetic.	Methods of instruction.
	Second	Methods of instruction.	Arithmetic.	. . . .	. . . .	. . . .	Arithmetic.
	Third	. . . .	Religious instruction.	Religious instruction.	Religious instruction.	Religious instruction.	. . . .
8 to 9	First	Attend model school.	Attend model school.	Attend model school.	Attend model school.	Attend model school.	Attend model school.
	Second	Geography.	Natural history.	Profane history.	Natural history.	Geography.	Profane history.
	Third	Piano or arithmetic.	Piano or geometry.	Piano or arithmetic.	Piano or geometry.	Piano or arithmetic.	Piano or geometry.
9 to 10	First	Methods of instruction.	Grammar.	Composition.	Grammar.	Composition.	Grammar.
	Second	Geometry.	Religious instruction.	Religious instruction.	Religious instruction.	Religious instruction.	Geometry.
	Third	Grammar.	Grammar.	Composition.	Grammar.	Grammar.	Grammar.
10 to 11	First	Thorough bass.	Geography.	Thorough bass.	Composition.	Recitations.	Examinations.
	Second	Grammar.	Grammar.	Composition.	Grammar.	Grammar.	Examinations.
	Third	. . . .	. . . .	. . . .	. . . .	. . . .	Examinations.
11 to 12	First	Singing.	Religious instruction.	Religious instruction.	Religious instruction.	Religious instruction.	Singing.
	Second	Singing.	Methods of instruction.	. . . .	Arithmetic or piano.	Methods of instruction	Singing.
	Third	Geometry or violin.	Arithmetic or piano.	Geometry or piano.	. . . .	Geometry or piano.	Arithmetic or piano.
1 to 2	First	Organ.	Organ or methods of instruction	Organ.	Organ.	Organ or composition.	Organ.
	Second	Drawing.	Writing.	. . . .	Writing.	Drawing.	. . . .
	Third	. . . .	Drawing.	Recitations.	. . . .	. . . .	Drawing.
2 to 3	First	Organ.	Organ.	Organ.	Methods of instruction,	Organ.	Organ.
	Second	Recitations.	. . . .	. . . .	. . . [or organ.	Recitations.	Arithmetic.
	Third	Writing.	. . . .	Writing.	. . . .	Writing.	Recitations.
3 to 4	First	Drawing.	Writing.	Methods of instruction.	Drawing.	Writing.	. . . .
	Second	Piano.	Piano.	Piano.	Piano.	Piano.	Piano.
	Third	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
4 to 5	First	Methods of instruction	Natural philosophy.	Art of teaching deaf and dumb.	Natural history.	Natural philosophy.	Art of teaching deaf and dumb.
	Second	Piano.	Piano.	Piano.	Piano.	Piano.	Piano.
	Third	Singing.	Geography.	Profane history.	Geography.	Profane history.	Geometry.
5 to 6	First	Methodic.	Profane history.	Singing.	Methods of instruction.	Profane history.	Singing.
	Second	Thorough bass.	Thorough bass.	Singing.	Thorough bass.	Thorough bass.	Singing.
	Third	. . . .	Natural history.	Singing.	. . . .	Natural history.	Singing.

*** Further instruction in instrumental music is given in the evening.

PLAN of INSTRUCTION pursued in the Three Courses, at the Normal Seminary at Lucern, Switzerland.

HOURS.	MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
8 to 9, or ½ past 9.	1st course, Arithmetic.	2d and 3d course, Grammar and school discipline.	1st and 2d course, Religious instruction.	3d course, Writing.	1st course, Geometry.	2d and 3d course, Composition.	1st and 2d course, Religious instruction.	3d course, Writing.	Same as	Monday.	1st and 2d course, Religious instruction.	3d course, Geometry.
9, or ½ past 9, to 10 or 11.	Grammar and school discipline.	Arithmetic.	Grammar.	Religious instruction.	Composition.	Geometry.	Writing.	Religious instruction.	. .	. .	Grammar.	Religious instruction.
10 to 11 .	. .	. .	1st course, Geometry.	2d and 3d course, Composition.	. .	. .	1st course, Composition.	2d and 3d course, Arithmetic.	. .	. .	Arithmetic.	Statistics of Switzerland.
11 to 12 .	. .	Singing.	Si..ing.	. .	. .	Singing.	Singing.	. .	. .	. .	. .	2d and 3d course, Singing.
	1st course,	2d and 3d course,	1st course,	2d and 3d course,	1st course,	2d and 3d course,	1st, 2d,	and 3d course.	1st course,	2d and 3d course,	1st course,	2d and 3d course,
½ past 1 to 3.	Art of teaching.	Geometry.	History.	Arithmetic.	. .	. .	Draw-	ing.	Art of teaching.	Arithmetic.	History.	Geometry.
3 to 4 . .	Arithmetic.	Natural philosophy or history.	Writing.	Natural philosophy.	. .	. .			Arithmetic.	School discipline.	Arithmetic.	Natural philosophy or history.
6 to 7 . .	Gymnastics.	Geography.	Geography.	Gymnastics.	. .	Geography.	Geography.	Gymnastics.	Gymnastics.	Geography.	Geography.	Gymnastics.

VII.

REPORT ON THE EDUCATION OF PAUPER CHILDREN.

By E. C. TUFNELL, Esq., Assistant Poor Law Commissioner.

To the Poor Law Commissioners.

GENTLEMEN, *December*, 1839.

IT appears to me impossible to over-estimate the importance of duly attending to the education of the pauper children, and to the fitting them for the stations they are likely to occupy in after life. The Kentish workhouses contain more than two thousand children, most of them orphans or deserted, or who, from some other cause, will be dependent till maturity on the parish; and the good or ill that may result to society, according as these large numbers are well or ill-instructed, the happiness they may enjoy or impart, the misery they may suffer or inflict in after-life, as a consequence of their present treatment, makes this question one of fearful moment. Under the old system of poor laws, it is well known how frequently a family which once became pauperised remained so ever after: pauper parents reared pauper children; and thus habits of dependence on the poor-rates seemed to descend, as part of their natures, from generation to generation. To stop this hereditary taint would be to annihilate the greater part of the pauperism of the country; and that this may be done—that the children thus situated may be so brought up as to make it a moral certainty that they shall never in after-life become dependent on the rates, but always maintain respectable and independent stations—may, I think, be proved to demonstration. This result, however, will not be effectually attained by our present poor law arrangements, and the experience of four years has convinced me that considerable modifications are required to work out this desirable end.

The evil which is at present felt to a considerable extent, arises from the difficulty of imparting to workhouse children such an amount of religious and industrial instruction as shall make their services of sufficient value to induce persons to take them out of the workhouses; in them, consequently, they frequently remain long after the time when they ought to be earning an independent livelihood. Several Boards of Guardians have made to you serious complaints of the difficulty of disposing of their pauper

children; and from applications for advice how to act under these circumstances, I select the following from the Eastry Guardians:—

"The attention of the Board of Guardians having been requested by the Governor, at the weekly meeting held yesterday, to the number of boys now in the workhouse who are fit for service, and willing to be engaged in any employment which can be offered for them, with the probability of maintaining themselves without further charge to the Union; submitting, at the same time, a list of names for the consideration of the Guardians of boys whose ages are from 13 to 16 years; the Guardians being also satisfied that the subject is one of very grave importance, and seeing that no present opportunity offers for obtaining that employment, which is so desirable to prevent an habitual taste for the workhouse, and to subdue a disposition for pauperism, it was unanimously determined that the Poor Law Commissioners be requested to advise the Guardians as to the best means to be adopted for obtaining services for about 12 or 14 very promising boys; the Guardians being of opinion that the children of the independent labourers have the first claim upon them, and that it is requisite a wider field should be sought for the children who are brought up in the workhouse."

The following is from the Tenterden Board:—

"The attention of the Board has been painfully directed for some time past to their total inability to dispose satisfactorily of their great boys (orphans) They are become unfit for the school, and when removed to the able men's ward, evince no particular desire to leave the workhouse. The Board of Guardians have sent to their parishes, from time to time, lists of the boys fit for service, and requested the parish officers to endeavour to find service for them, but they have not succeeded.

"What is to be done with great boys?—is a common question, not only at the Board, but out of doors, and it is a question which the Board most respectfully ask of the Poor Law Commissioners.

"Can the Board of Guardians be allowed to offer premiums to apprentice them to trades in the larger towns?—and they will most thankfully receive suggestions of any method by which their youths may be placed in situations in which they are likely to become useful members of society."

The preceding two instances will be felt to illustrate the difficulty adverted to the more forcibly, when I add that both Boards of Guardians have taken not a little care, and incurred expenses, in order to bestow on the children such an education as shall qualify them for the stations they are likely to fill, but with what success the above complaints will show.

The following application was lately transmitted to you from the Rye Guardians:—"In consequence of the increasing num-

ber of orphans and illegitimate children in the workhouses, the Guardians took it into their consideration at their meeting on the 20th instant the propriety of adopting some mode for the purpose of getting such of these children as are able into service, when it was resolved that application be made to you for your sanction and authority to the Guardians, paying a small sum weekly to those persons who will take into their service, from the workhouse, any orphan or illegitimate child under sixteen years of age, until the Guardians shall see fit to discontinue such payment, as otherwise there appears great uncertainty of such children obtaining situations. There appears almost a proportionate decrease of the number of children in the workhouses belonging to able-bodied paupers; the reason for which, to a considerable extent, it is believed, arises from the children having greater advantages in obtaining situations through their parents than those children in the workhouses being orphans or illegitimate; and the Guardians are unable to suggest any better mode of relieving the parishes of the burden of maintaining so many children of the latter description than that stated in their resolution of the 20th instant."

It appears to me that the evil in question may be readily traced to its source, and that it is entirely owing to the impossibility, with our present workhouse arrangements, of giving an appropriate education to the children. You are aware how thoroughly this difficulty has been conquered at the Norwood establishment, where, of the 1100 children it contains, it is rare to find any above the age of 13, unless they have been admitted at or above that age; so readily do they, for the most part, get into service without premiums. But insurmountable obstacles oppose any attempt to imitate the regulations of that establishment in country workhouses. In the first place, the expense would be too great. In the Norwood house, one superior workman is found capable of instructing 100 boys in the business of tailoring; that number being divided into classes of 50, who are taught on alternate days. There are very few country workhouses which could furnish 10 boys, whom it would be desirable to instruct in this species of industry; consequently, it would cost as much in the teacher's salary to instruct 10 boys in this art, in a country workhouse, as 100 at Norwood. Again, in that establishment one master is found capable of superintending a class of 130 children in the intellectual and religious part of their education, during a portion of every day's school routine. Some country houses contain 130 children, but they are of all ages; consequently, in order to instruct them as efficiently as at Norwood, it would be necessary to divide them into at least six departments, and have six masters instead of one. But here again another inconvenience would occur, as many of the classes would be too small for efficient teaching; and how would this difficulty be in-

creased in nine-tenths of the Unions, which, in fact, do not contain one quarter of these numbers! No school can be properly conducted without classification, but classification is impossible without numbers, unless individual teaching be resorted to—a method which is far too expensive, and least attractive and useful; and not one Union in ten contains a sufficient number of children for carrying out this important arrangement even to a tolerable extent. It is true that considerable improvements might be made in the present system were the Guardians to engage a number of competent instructors at considerable salaries; but the expense would be so disproportionate to the number of children to be benefited in each instance that Boards would never agree to incur it, and, were they to incur it, the main end in view, owing to the deficiency of numbers, would be only partially attained.

But by far the worst evil to be apprehended from the present system arises from the danger of sending forth into the world a set of beings, vicious in habit and pauperised in feeling, to be future burdens on the parochial rates, or candidates for the gaols and hulks. If there be any truth in the maxim, "As is the master so is the school," there must assuredly be in many workhouses little chance of the children ever becoming high-minded and respectable members of society. There is no class of officers of whom such continual complaints are made, or for whose dismissal you have been called upon to issue so many orders. I need not call to your recollection the numbers you have been obliged to discharge for drunkenness or other immoralities. I have reason to believe great cruelties are practised, at times, on the children, which probably do not always come to light, as a schoolmaster has no difficulty in awing an unhappy orphan, who probably has not a friend in the world, into silence, and suppressing all complaint. In one case a child was beaten so severely that, had not the punishment been stopped by the fortunate entry of the governor into the apartment, death would probably have ensued. In another, a schoolmaster was in the habit of tying up with a handkerchief the jaws of those boys whom he thought deserving of punishment, to prevent their screams being heard, and then beating them in the most savage manner. The persons who were guilty of these cruelties had been village schoolmasters, where they could not have practised such conduct, as a child so treated would immediately have complained to its parents, and would have been taken away from the school, which would quickly have shown the master, from policy, if not from charity, the necessity of mildness in future. But where is a poor friendless orphan or foundling (for of these classes a great proportion of the workhouse children consist) to turn for assistance, when it knows no one on whom it can place confidence, or to whom it can utter complaints? Hence it seems incumbent on us, for humanity's

sake, to be doubly cautious whom we select as schoolmasters for children thus situated, that is, whom we make rulers of these little worlds, lest we introduce a tyrannical despot rather than a father. A bad schoolmaster almost invariably endeavours to maintain his authority by harshness and cruelty; a good one, by winning the favour and affection of the children, which is quite compatible with good discipline. The following is extracted from a letter I received from a chaplain to a Union workhouse:—

"The evidence I produced against that man (the schoolmaster) was quite disgusting in its nature; but if you wish to have a copy of it, it shall be sent you. I do not believe that you have ever yet met with circumstances showing so strongly the necessity of extreme caution in sanctioning the election of a schoolmaster.

"I now have a schoolmaster and mistress of good principles; but for which I should still know nothing of the real state (morally) of the Union house. Their faithful discharge of duty has enabled me to exclude a man, who, when schoolmaster, endeavoured at least to seduce several of the elder girls in the school."

Again, a frequent cause of complaint against the schoolmasters is their incompetency or neglect to attend to the industrial education of the children. They have been accustomed to village teaching, where the intellectual department is alone attended to or necessary; but workhouse instruction, if properly conducted, differs in one essential point from that which is communicated in other schools, since it is absolutely necessary that the children should be taught manual labour, and be accustomed to use their hands as well as their heads. Otherwise the inconvenience is felt, which appears in the complaint that I have frequently heard from farmers, that the boys taken into their service from the workhouse can read and write pretty well, but can do nothing else, and therefore are hardly worth their wages. Not the least injurious result of this defect is the disrepute which it has the tendency to bring on intellectual instruction altogether. A farmer will say, for instance, "That boy, sir, can read and write, and say his catechism as well as our parson; but he is not half the use to me that that other little fellow is, who never was at school in his life, and knows as much of A, B, C as my horses. I don't see what is the use of education!"* Except in a very small

* I invariably find that the hostility which some persons profess to education resolves itself, on explanation, into hostility to half-education or mis-education. They seize hold, for instance, of some such case as that mentioned above, where a boy has only been half-educated, and an essential part of what a youth so situated ought to have been taught, viz., some industrial pursuit, omitted, and triumphantly ask whether his education, *i. e.*, really his mis-education, has fitted him for his station. Of course it has not, since he has not been educated, but mis-educated. Education, if it means anything, must mean that which fits a child for its future station and prospects. Nothing else has any title to the name, on any fair construction of the

school, it is not absolutely necessary that the master should be especially qualified to instruct the children in shoemaking, tailoring, and other branches of manual labour, as it would be best to engage workmen of these trades to teach them; but it is his duty to superintend the industrial masters, and to regulate the hours of attendance at the respective occupations; and unless he has a clear conviction of their importance to the future welfare of his charge, and so much practical acquaintance with them as to be capable of judging of the goodness of the work, it is clear that this part of the school business will never be properly attended to. It is, however, in all cases desirable that he should teach the gardening himself, as this forms a healthful and agreeable variation to his in-door instruction, which latter need not last more than three hours daily.

Sometimes a master, tolerably well qualified in other respects, will err from an incapacity to maintain discipline among his pupils; an instance of which lately occurred, where, in the course of a month, a considerable school got into such disorder, that, as I was informed, the smallest boy was master of the schoolmaster, who, consequently, had to be peremptorily discharged. In a school where the children board, the maintenance of correct discipline is of supereminent importance; in fact, without it no workhouse school can be even tolerably conducted. But by far the worst fault I have to find with the present schoolmasters is the total incompetency of a majority of them in an intellectual point of view. Many of them cannot explain the simplest passage in Scripture, and, consequently, all their teaching is by rote, which of course makes no impression on the boys, and is forgotten as soon as learned; or, what is worse, it makes an erroneous or heretical impression. I could mention several remarkable instances of this result, one of which I will give. The real meaning of the words of the Catechism, in that part which relates to the holy Eucharist, is very difficult to be collected. The teachers are not capable of giving an explanation; and, consequently, the majority of the children, *i. e.*, the duller ones, attach no meaning to the words at all, and they pass from them as from so much Greek, while those children who think at all, get from the passage the doctrine of transubstantiation.

The extraordinary blunders I constantly hear committed by the schoolmasters in teaching the children are almost incredible. An hour before I am writing this, I requested a workhouse schoolmaster to examine his pupils in the last chapter they had been reading, which happened to be part of the 4th St. John; when, amongst other blunders, he mistook the publicans for the Sad-

term. To talk of an education that unfits children for the lot they are to occupy, and renders them dissatisfied with it, is as reasonable as to talk of a black white, long short object.

ducees, confounded John the Baptist with John the Evangelist, made Galilee a city of Samaria, and put Samaria in Jerusalem. I once found a schoolmaster appointed who could neither read nor write.

You will perceive what various qualifications are required in a workhouse schoolmaster in order to do justice to the children. He may be sufficiently informed in an intellectual point of view, and yet be totally useless from want of a knowledge of discipline. He may possess both these qualities, and yet fail from paying no attention to the industrial education of the children. These two last acquirements are comparatively little required in other schools; and this consideration leads to the conclusion, in which daily experience confirms me, that, in order effectually to provide schoolmasters properly qualified to educate pauper children, a training school for teachers devoted to this particular service is necessary. The Norwood establishment has, in some degree, served this end; and the good effects that have followed from throwing it open to teachers, who wish to profit by the opportunities for observation which it affords, notwithstanding the absence of anything deserving the name of normal instruction, are a sufficient proof of the utility of a regular training institution, and of what might be expected from one furnished with all necessary appliances. I beg to present this suggestion to your special attention.

There is also considerable danger of moral contamination to the children from their residence in the same house with adult paupers. It is perfectly well known to all who have had experience in poor law matters, that a very large proportion of the adult workhouse inmates are persons of the worst characters, the very refuse of the population; and there is a reason in the nature of the subject, which it is not now necessary to explain, why it is and always must be so. That this class, morally infected as it is, should be kept separate from the children, is of course of primary importance; and in every Union workhouse means are taken to provide for this end, by building separate wards and yards for each class. I am confident, however, that architectural arrangements can never effectually secure perfect classification in a workhouse. Conversation, sometimes of the obscenest description, is carried on over walls and through windows. In going to dinner or chapel there are ready means of communication; doors are accidentally left open; and the adults are employed in carrying or removing furniture or other articles from one part to another. Sometimes, on witnessing adults in the children's apartment, and inquiring the reason, I have been told that most of the children are out walking with the schoolmaster, and, consequently, these adults are placed to take care of some children, who, from chilblains, or lameness, or for punishment, or some such cause, are

kept at home; or they are carrying dinner into the children's rooms, and it gives less trouble to employ two adults in this business than four or five children, whose smaller strength makes a greater number necessary. The conversation engendered in such an establishment is anything but moral. Perhaps a woman comes into the house to lie in of a bastard child, and every circumstance relating to it becomes the talk of the house; another dies of a foul and loathsome disease, which gives rise to a multitude of curious inquiries. The atmosphere of a workhouse that contains adult paupers is tainted with vice: no one who regards the future happiness of the children would ever wish them to be educated within its precincts.

In some workhouses the guardians have gone to a considerable expense in procuring efficient schoolmasters, and provided, with great liberality, all the school apparatus that can be required; and hence in those houses the intellectual education of the children is extremely good. But the industrial education of the children, that is, their instruction in manual labour, which is hardly less important than the former branch, is frequently not less deficient there than elsewhere; and, besides, when we have got a good schoolmaster in a Union workhouse, in nine cases out of ten we have constant disputes and bickerings between him and the governor, which usually end in the resignation of one or other. The governor is of course the superior officer, and it is therefore necessary that the schoolmaster should be in subjection to him. The latter, however, when efficient, is generally by far the better instructed and more accomplished of the two; and hence his subordination to an inferiorily-educated man is felt as a sort of hardship, and produces an uneasiness of feeling which readily ends in open rupture. It is almost impossible to define accurately the limits of the duties of these two officers, and, consequently, each imagines that the other is encroaching on his department, and the best schoolmasters are continually leaving on these grounds. If a nonentity is appointed as schoolmaster, these difficulties of course cease. So in fact, in many houses, we fall into this dilemma. We must either have an ignorant characterless master, of that supple and pauperised disposition which acquiesces in every arrangement and interference with his proper authority, from sheer stupidity and inability to have an opinion of his own, than which nothing can be less adapted to implant vigorous, manly, and self-relying principle in the children, or we may have a good master with the accompaniment of continued squabbling.

In a few cases a good chaplain, who understands and takes pleasure in this sort of duty, is found to supply, in great measure, the deficiencies of the schoolmaster. But this cannot be generally expected.

Perhaps it might be supposed that those Unions which have not central workhouses, but several district ones, one of which would of course be devoted to the children alone, avoid many of these inconveniences. This is the fact, but it is only to fall into others; for a schoolmaster who has all the accounts, provisions, &c., of a house to look after, which in a central workhouse is taken off his hands by the governor, has little time to pay to the instruction of the children; and hence it is generally found that in these district children's workhouses the intellectual department is far worse attended to than in the central. The master, though qualified, is too much occupied to pay due attention to this part of his business. The industrial instruction is of course no better in this case than the other: but it is not of much importance to discuss the difference between this and the central system of workhouses, since the latter is adopted by nearly every Union, and can now never be changed for the former. Only three Unions, out of the twenty-five in Kent superintended by myself, have district houses, and in two of these they will shortly be given up.

The inquiry here naturally suggests itself, how was this matter treated under the old system of Poor Laws?—may not the difficulty be partially owing to the practice of workhouse relief, which forms so essential a feature of the amended law? But in fact the evil alluded to existed to a much greater extent under the old law than the new. The 25 Kentish Unions contained under the former system about 700 more children in workhouses than at present, but being scattered about in small village workhouses, their numbers, though so much greater than now, were less apparent. In fact, the efforts that have been made in Union workhouses to give the children a sound and useful education, and so fit them to form independent members of society, have to some extent been successful, and to this the great diminution of workhouse children has, I believe, been owing: but insufficient progress has been made towards the end, and hence the evil I am complaining of. Formerly few persons would ever have thought of taking a boy or girl from the workhouse. It is not so now; but the counter-result, from the reasons above given, is far less general and satisfactory than it ought to be. In most cases, under the old system, the children were not taught at all. In one workhouse in Kent I remember finding 60 children, only 11 of whom could read, and 2 write, and that only upon slates. With several, such perverse ingenuity had been used that they had been taught to hold books in their hands, and repeat aloud, turning over the pages as if reading, while in fact they did not know a letter. Though in many houses at present the intellectual education is bad enough, in a very fair proportion it is decent, and in a few extremely good; upon the whole, it is infinitely superior to what it ever used to be. In reference to the reduction of work-

house children, it should be remembered that the plan formerly pursued of apprenticing them by the aid of premiums, or of giving weekly payments to those who would take them into service, that is, of bribing persons to give them employment, has been given up. If they now get work, it is mostly because they are partly fitted for it; and that fitness I am desirous of increasing. The plan of apprenticing by means of premiums is sometimes advocated as a scheme for disposing of the children; but it can hardly, I should think, find favour with any one who has any knowledge of the miserable abuses that resulted from this practice in former periods. One of the worst of these was the inducement it gave to any person who wished to pay a debt, or who might think it as honest a way as any of getting 10*l*., to take a pauper apprentice for the sake of the premium. He would then ill-treat the boy, who would consequently abscond and leave his master the unburdened advantage of the premium. One good effect of never giving money inducements to take children into service is, that they are not likely to be taken out, unless fitted to earn a livelihood, or, if taken unfitted, they are quickly returned on the guardians' hands, who are thus advertised that there is some error in the management of the children that requires a remedy. It used to be the practice with several London parishes to dispose of their pauper children by apprenticing them in the cotton factories, and that was at a time when the factories, being unrestricted by law, used to work 15 or 16 hours a-day, and consequently the labour was deeply injurious to health. I some time ago met with a man, who when a boy had been so apprenticed by the parish of St. Pancras, London, and he certainly did little credit to the education he had received in the workhouse, as he was a professed atheist. Under the present system, a boy so instructed could not have been got out of the workhouse at all, except by the aid of a premium, or, if taken by any one, he would in all probability be quickly sent back from defect of character; and it is desirable that it should be so.

I should observe that there are some Unions whose workhouses form exceptions to the substance of these remarks, and where the children appear to be disposed of without difficulty. This I believe to be owing to the existence of a considerable demand for children in the neighbourhood, or to two or three persons of influence taking unusual pains in order to find places for the children. These cases, however, are strictly exceptive; but I wish especially to allude to them, as too hasty a generalization from such instances has led some persons, as well as myself in a former Report, to imagine that the evils I have been detailing had been adequately provided against. Comparing the present condition of the pauper children with what it was formerly, nothing can be more marked than the improvement; but we are

apt to forget, in looking at what has been done, how much remains to be done. I am persuaded that in the work of pauper education our business is only half accomplished, and that some vigorous measures are requisite in order to satisfy that which the dictates of both interest and humanity demand.

I believe that the sole effectual remedy for the evils here described will be found in the establishment of district schools common to several Unions, according to the plan recommended by the Committee of the House of Commons, which sat last session and the preceding one to inquire into the operation of the Poor Law Amendment Act. "The evidence I can send," writes the chaplain of a Kentish workhouse, "and remarks connected with it, will strongly tend to show that no real and permanent good will be effected for the children of the Unions till district schools be established, and that in them such children are placed under the care of persons competent to instruct; their instructors also being quite free from the low surveillance and partial control of one-tenth educated and injudicious masters and matrons." The success of the Norwood school, and of several of the large schools that have been formed by the London Unions, affords ocular demonstration of the ease with which all these difficulties may be surmounted, when a large number of children separated from the adult paupers are brought together; though, had we not these facts and experience to guide our views, the very nature of the case, and of the evils to be contended with, would point out this as the obvious and ready mode of overcoming them. The expense of providing competent instructors, and making the necessary arrangements for conducting the intellectual and industrial education of the children, is so great as to prevent individual Unions incurring it. But this expense diminishes proportionately as the number to be instructed increases; consequently, if we unite the children of several Unions, this difficulty of expense vanishes. Less than a third of the present number of masters would suffice; but the salary of one good master will not equal what is given to two bad ones, while he might be five times as efficient. Again, the children in individual workhouses are rarely sufficiently numerous for effectual classification: combine the Unions for school purposes, and this difficulty ceases with the other.

I am aware that objections would be started to this proposal, but not one which, as far as I can see, would not readily yield to a candid consideration of the point. As such a district school would be 10 or 12 miles, or even more, from many parts of the Unions that supplied it with inmates, supposing, it would be urged, a family sought refuge in the workhouse for a few days, would you send the children out of the Union 10 or 12 miles off to the district school, to be sent back over the same space of

ground a few days after? This objection is easily met; for, since the sole object of these district schools is to provide a more serviceable education for the children, and it is obvious that no effect, either for good or evil, could be wrought on such transient occupants of the houses, therefore paupers of this description need not be subjected to the proposed classification, but might be kept without injury in the workhouse of their own Union, during their few days' sojourn there, without using the district school at all. But the great majority of children are not passing but permanent inmates of workhouses till they get to service, and for the latter class only this plan is intended or can be of any service.

Another objection would be put in the imagined difficulty of governing these institutions. A committee, formed of two members from each Board of the united Unions, could superintend such a school as readily as a Board of Guardians does its own little school now. It is true that the members of this committee would have to travel farther than Guardians at present in order to get to the place of meeting; but when the school is in complete action, and a visiting committee of the nearest resident members organised, I see no reason why the superintending committee should meet oftener than once a-month; and if there is any weight at all in the foregoing reasons, surely the advantages to be derived from the plan far outweigh the disadvantages of these twelve journeys yearly required from about a dozen individuals selected from a quarter or half a county. The good to society in a pecuniary view alone, by being relieved from the depredations of but one youth, who is hereby saved from a life of crime, would more than repay the expense of these journeys for a whole year.

Some persons would doubtless insist on the cruelty of sending children away to a considerable distance from their parents and friends. This is inapplicable to a large proportion of the workhouse children, who are orphans, foundlings, or wholly deserted; but where it is applicable, it is only asking paupers to do by their children what the upper classes do by theirs, with the difference that the former are not required to pay for their education, nor to send their children a quarter so far off as is usual with the rich. All possible means are to be taken to secure the physical and moral well-being of the children; the change proposed will have this sole object; and we shall be told we are acting with cruelty and harshness towards them. No objection will less stand investigation; but, absurd and groundless as it is, I have no doubt that much would be attempted to be made of it.

Great fault would be found with this plan of district schools on the very grounds which I have alleged in their favour, viz., the improvement in instruction and training which they would bring about. It would be said that the scheme proposes to give too great advantages to the pauper children—to educate them beyond

their stations. I have constantly to lament the confusion that seems to exist in the minds of many Guardians in the application of the principle on which the Poor Law is founded, viz., that a man who applies for parish relief shall not be placed by the receipt of it in a better condition than he would be did he support himself by his own industry. The propriety of the application of this principle to adult paupers is undoubted, but by no means so to children. With respect to the former class, those who are experienced in these matters well know that the workhouse acts as a provocative to seek work and independence almost entirely by the restraint it imposes; the food, lodging, and clothing it affords are in most cases superior to what an independent labourer enjoys, and without the regularity, order, and discipline which it enforces, thousands would prefer its easy and careless existence to work. But it is impossible to apply this principle to children; restraint is natural to them, and they cannot be more restrained and disciplined in a workhouse school than they would be at home or in a gentleman's boarding-school. Besides, were it possible to depress the condition of the pauper child in this way, where would be the use of it, since he cannot support himself out of the house? Therefore the only reason for treating the able adult pauper so as to make him prefer independent industry to parochial support fails when applied to the pauper child.

I know it would be said that we should be giving the pauper children a better education than that obtainable by the independent labourer's child. While I allow and lament this truth, I wholly deny its force. Because the schooling of children out of the workhouse is neglected, is this a valid reason and excuse for equally neglecting those who are within it? According to this argument, not a single ray of moral or religious knowledge should be allowed to illumine the mind of a pauper child; he should be brought up a perfect brute; since it is certain that this is the lot of innumerable independent children. The object of the present mode of administering the Poor Laws is to check pauperism. To this end nothing is more powerful than giving moral advantages to the children; we can thereby implant in them the seeds of industry and good conduct, and thus furnish them with the best safeguard against becoming future burdens on their parishes. Moral benefits may be given to any extent to paupers, whether young or old, without thereby making pauperism attractive, or violating the principle of the Poor Law. An adult pauper has advantages of this description in the workhouse usually far beyond what he can have when independent. He is supplied with religious books, with the continual ministrations of a chaplain, who, if he is sick, or otherwise in the want of spiritual consolation, will attend him at his call; Divine service is performed within ten paces of him; weather, distance, or slight illness need never

prevent his attending it. But all this has a dispauperising instead of a pauperising effect, tends to inspire him with more and higher motives to exertion, and to make him a wiser and a better man. The argument I am combating would deprive him of these privileges, and consign the children to barbarism, on the ground that we should thus be discouraging pauperism. We should not; but as respects adults, such a course would diminish to nothing the small chance we have of substantially benefiting them, and, as respects the children, would turn out into society herds of paupers or brutalized ruffians.

The extreme ignorance of most children when they first enter the workhouse, together with the great ease with which, in a well-conducted school, they appear to be taught and reformed, affords a pleasing presage of the good that might result to society were all those, whose condition seemed cast irrevocably among the most degraded, thus furnished, as they so easily might be, with that internal safeguard against future misconduct, which a sound education affords. On entering the workhouse it frequently happens that children, even those that are 14 or 15 years old, do not know a letter, have never heard the Lord's Prayer, nor even of a God: but their docility is usually unbounded. From the perfect control that the circumstance of their boarding in the house gives the master, and their consequent freedom from all corrupt external influences, and those petty interruptions to constant attendance that so frequently thin the ranks of a village school, the instruction is imbibed with a rapidity that far surpasses the progress in day schools. It is also worthy of remark, that those children who most distinguish themselves for ability and good conduct are very generally those who are orphans or entirely deserted. The cause is obvious: as the parents of pauper children are too often the most vicious of the community, and consequently are not likely to impress other than their own baneful habits and propensities on their children. It is a mournful but undoubted truth, that with by far the majority of workhouse children who are not orphans, no greater harm can be done them than by allowing them to associate with their parents. I have frequently heard the schoolmasters lamenting the injury sustained by children, even by the occasional half-hour's intercourse that is allowed between them. I have known parents who have been allowed to send children to the workhouse as relief, take them out for a day and return them drunk, having thus satisfied their parental affection by giving them what they call a treat, and what in their own opinion doubtless is so. In one instance a child so treated actually died from the effects of the debauch. A chaplain of a Union writes to me the following:—" I am myself convinced, from the observation I have frequently made, that in a great majority of instances, the cruelty to the children consists, not in taking them

away from their parents, but in allowing them to have any intercourse with them and their friends, so called. I here, observe, speak not of parents that might have been, or parents that may be hereafter, under a system more judicious, rational, and promotive of moral culture, but of parents as they are."

Sometimes the most intelligent children will become so acutely sensible of their forlorn condition in this respect, that they cannot bear the slightest reference to their parents; and when, unaware of a boy's sensitiveness on the point, I have inadvertently in conversation with him touched on this subject, I have been answered with a burst of tears. Many of them, I am certain, are launched into the world from the well-managed schools, with the highest sentiments of honour, and determination to preserve their characters unsullied, and they must hence frequently experience a strange and painful conflict between their feelings of propriety and the claims to duty and respect from the authors of their being, whom they see deformed by vices which they have been taught and accustomed to hate and despise.

Hence, however, at times results a most gratifying circumstance, as a child well instructed will not unfrequently attempt and sometimes succeed in reforming his parents. I know one instance in which a boy, who had been fortunate enough to be brought up in a well-conducted school, reformed a vicious parent by communicating to her by letter some of the lessons he had received in the workhouse, which bore upon the vices to which he knew her to be subject.

The few weeks of absence which you have granted me in the last two years I have devoted to making personal inquiries into the management of workhouses on the continent. One point excepted, I think them far worse regulated than our own. There is frequently no distinction of treatment or classification made between the old and able-bodied; the houses are built so as to preclude all possibility of effectual inspection, they are consequently often dirty and disordered, while the inmates are not employed at all; or in some houses may be seen engaged in games of hazard. I have even found criminals mingled with the other workhouse tenants, being placed there for security; and the workhouse frequently forms part of the same building with the gaol: but in one particular I found them almost universally far superior to our English establishments. The children were everywhere (except in one instance, in the canton of Berne) carefully separated from the other inmates, while a degree of expense and care is bestowed on their education, that infinitely surpasses what is usual here. My inquiries have been confined to Switzerland, a small part of northern and western Germany, and Holland.

It appears to me that a strong reason may be found in favour of paying the utmost attention to the education of pauper chil-

dren, regardless of whether it is superior to that obtained by others, in the circumstance that they are for the most part wholly friendless, and hence have no one but themselves, their own unassisted talents and acquirements, to depend upon in order to get a living. The child who is fortunate enough to have a parent living by his own independent exertions has a friend who is constantly on the look out for a place for him—whose position among employers and other labourers gives him innumerable opportunities for obtaining what he seeks, and who is ever ready in adverse circumstances to bring to his offspring succour and advice. This circumstance is plainly pointed out in the communication from the Rye Guardians before quoted. Such tender and watchful care is ill supplied by art, which can form but a poor substitute for the natural and well-directed affection of a father or mother. It surely then becomes us to do all in our power to assist those who are thus bereft of their natural protectors; and, as some recompense for the absence of that aid and material capital which friends or parents might afford them, to give them a capital of skill and knowledge, which they cannot lose, and on which they may trade and erect the fabric of their future fortunes.

Those who consider this question on the low ground of economy should calculate the incidental expenses that arise owing to the present defective system, as every boy who stays in the house a year beyond the time at which, under improved management, he would be able to get work, costs his parish at least 8*l*. The cost should also be taken into account of relieving those in after-life who, in consequence of their early inefficient training, have not the energy or the talent to preserve independence, and are hence constant recipients of relief, and pass their latter days as pensioners on the parish purse. To this should also be added the expense of those whom this bad education may lead into courses of crime, and who prey upon society to the average amount, according to the Constabulary Report, of not less than 25*s*. weekly.

With the majority I hope this pocket argument will be unnecessary, and that they will see a sufficient reason for the change in the chance of securing the present peace and future happiness of the 40,000 or 50,000 children that are now in the English workhouses. The neglect of this class in former times has been visited in bitter retribution on the country. "A very large proportion of the inmates of all the London prisons," writes Mr. Hickson, who made an extensive inquiry and report to you on the subject, "have passed as a preparatory step some portion of their lives in workhouses. In Tothill Fields' Prison I examined 25 boys, whom I found at the treadmill, 13 of whom were workhouse boys. In the Coldbath Fields' Prison, the House of Correction at Brixton, Clerkenwell New Prison, the Penitentiary, and other prisons, I examined a considerable number who had passed

through workhouses. In the Euryalus convict-ship, 25 boys out of 150 had lived in workhouses." The report from which this is taken was written more than three years back, and therefore refers to effects which originated antecedently to the operation of the Amended Poor Law. The evils of workhouse treatment which it indicates have mostly been remedied under the present system, but much still remains to be done. I think that we are not justified in stopping in the course which has been thus happily begun till we have reached its utmost practicable limit; and that this is a course which the interests of economy, common sense, sound policy, and religion alike require.

I have the honour, &c.

(Signed) E. CARLETON TUFNELL.

VIII.

REPORT ON THE TRAINING OF PAUPER CHILDREN, AND ON DISTRICT SCHOOLS.

By EDWARD TWISLETON, Esq., Assistant Poor Law Commissioner.

GENTLEMEN, *Norwich, 14th April, 1840.*

I HAVE already transmitted to you returns from all the workhouses in this district, of the various classes of pauper children who were inmates of them in the first week of last February.

I now proceed to offer some observations on the present state and future prospects of the workhouse schools, and I shall confine myself almost entirely to these topics, inasmuch as I had no opportunities of observing what means, if any, were adopted by the parochial and other authorities, previous to the passing of the Poor Law Amendment Act, for the proper education of the children in the parish workhouses. I would merely state that the general tenour of the information which I have received on this subject seems to prove, that previous to the passing of the Poor Law Amendment Act, children in workhouses (with some exceptions) were exposed to the contaminating influence of the society of adult paupers, that the instruction imparted was too often of the most meagre and imperfect kind; and that the workhouses, so far from being institutions in which the children of the rising generation might be trained in habits of industry and virtue, were frequently what all schools must be unless properly regulated, seminaries of vice.

1. With respect to the present condition of the workhouse schools I must premise that of the thirty-six Unions in this district, each with the exception of three has a schoolmaster, and of these three there is only one which has neither schoolmaster nor schoolmistress. In the latter Union, however, the children are allowed to attend a national school of the town in which the workhouse is situated.

Amongst these teachers there is, as might be expected, great diversity of acquirements, of intellectual power, and of moral character. They vary from the ignorant pauper schoolmaster, who is retained through motives of economy, when in fact it would be the wisest policy to bribe him with a salary not to teach

at all, to the full grown and complete trainer, who is acquainted with the best methods of instruction, to whom the duties of his vocation are a pleasure and a pride, and whose irreproachable example exercises an influence of pure good on those who are so fortunate as to be under his care.

The ordinary salary of a workhouse schoolmaster varies from £20 to £35 per year, exclusive of board and lodging, and I have had frequent opportunities of observing the great importance of not being niggardly in the offer of a salary. The sum of £5 or £10, more or less, will sometimes make the whole difference in the possibility of securing the services of an efficient trainer.

With one or two exceptions from Norwood, and one from Lady Byron's school at Ealing, the best schoolmasters in this district have come from Scotland. We have one from the Edinburgh Sessional School, and three from Mr. David Stow's Normal Seminary at Glasgow. These all adopt the elliptical mode of teaching which Mr. David Stow has carried to such perfection. This method of orally imparting knowledge, by which the trainer does not allow the pupil to be a passive recipient, but compels him actively to exert his mind by filling up sentences designedly left incomplete, is in my opinion an admirable improvement in the mechanical part of teaching. However, although the outward form may be easily copied, the life and the beauty of this system depend upon the skill of the teacher. But when the method is adopted by an individual of superior attainments, who is a proficient in his art, it has the power of arresting and sustaining the attention of children, and of imprinting ideas on their minds with an intense vividness which is unapproached by the usual methods of instruction.

In the intellectual part of teaching, the great superiority of the schoolmasters above alluded to consists in their making their pupils thoroughly understand what they read. Independently of experience, one might be inclined to suppose that the propriety of teaching children the meaning of what they read would be so universally recognised, that all schoolmasters would consider it an indispensable part of their duty: but this is far from being the real state of the case, and it is difficult to convey to others an idea of the gross ignorance exhibited by children, who are taught by ordinary English schoolmasters, respecting the meaning of the simplest words which occur in the Bible.

Indeed one might be sometimes tempted to imagine that the contract to teach reading, writing, and arithmetic, was construed literally and strictly so as to exclude anything besides; and that to teach the meaning of what is read was studiously avoided as something not contained in the bond, and therefore only entailing unimportant and superfluous trouble.

The real explanation, however, of this circumstance must be

sought in the general inaptitude of men to place themselves imaginatively in the situation of others who are their inferiors in mental culture. To teach properly demands, amongst other qualities, an absence, if I may use the expression, of intellectual selfishness in the trainer: it requires in him a power of transfusing for a moment his own mind into that of the child who is to be taught, so that he will carefully avoid the use of words which the child is unable to understand, and will adapt his illustrations to all the peculiarities of a youthful imagination. As for the ordinary explanations by question and answer of the catechism and of other books, which unfortunate children are often doomed to learn by heart, the skilful teacher never thinks of using such clumsy substitutes for the explanations which ought to be given orally by himself. He regards those questions and answers as hinderances rather than helps, if placed in the hands of a child. In fact, such long words are used in them, the expressions are so abstract, and the sentences so ponderous, that they are sometimes even more difficult to understand than the writings which they are intended to explain.

One important part of the Scotch system, which is lamentably neglected in England, is the teaching of the Latin roots of words, together with the meaning of the prefixes and affixes. Nothing, however, shocks the prejudices of some well-intentioned persons more than the bare mention of this topic. They speak as if they thought it the *ne plus ultra* of absurdity that pauper children should be taught the meaning of Latin words. Nevertheless, it must be evident upon reflexion, that as nearly half the words in the English language come from Latin roots, a knowledge of those roots must be highly valuable as an aid to the understanding of the English language. Now as there can be no doubt that this plan materially lessens the labour of learning the language, which without it indeed cannot be thoroughly understood, it is difficult to imagine what rational objection can be urged against the practice.

One happy consequence of the abandonment of the old system of teaching by rote, is that in a good school children take pleasure in being at school. The notion that school is a place of irksome confinement, a release from which is a subject of congratulation, is now likely to be exploded, and to give way to more rational and cheerful sentiments. The fact is, that nature has linked pleasure to the act of learning, and it argues for the most part ignorance or unskilfulness in the teacher when a contrary feeling is predominant in the majority of the pupils. Accordingly those who are in the habit of visiting schools may tell for the most part at the first glance by the looks of the children whether their schoolmaster understands his vocation. The happy looks of animation and intelligence which are visible in those who are taught

judiciously present a striking contrast to the dull leaden countenances of those who have the misfortune to be placed under the care of a heavy and cheerless pedagogue. Indeed, in the latter case it is fortunate if the countenances of the children assume merely an expression of vacancy. For an expression of sullen discontent is sometimes superadded, which to the looker on is purely painful, as indicating a long course of mismanagement, during which the natural aspirations and impulses of the youthful mind have been quenched or repressed.

Another advantage of the improved mode of teaching is, that it infuses into the children a taste for reading and intellectual pursuits. Those who are acquainted with the habits and acquirements of young agricultural labourers must be aware that books form no part of their pleasures; and that, in the mere accomplishment of reading, they are apt to go back rather than to advance from the point of excellence which they once attained in their village school. The deficiency cannot but be a subject of regret, inasmuch as a taste for reading, independently of its raising them in the scale of being, would be a source of rational amusement to them during long winter evenings, it might supply the place of the beer-shop, and would enable them to understand the sermons of the parish clergyman more often than there is reason to fear they do at present. This absence of desire for intellectual improvement may, perhaps, partly be accounted for by the practice which prevails in some village schools of teaching nothing but the Bible. Now in books written at the present day words constantly occur which are not to be found in the Bible. Accordingly, when a youth of seventeen or eighteen attempts to read such works, he is puzzled by long words of Latin origin, which he has never seen before; the style of writing is new to him, and from a sense of the difficulties which are in his way he is deterred from reading such books at all. At the same time, it is possible that he may not be strongly imbued with religious feelings so as to take pleasure in reading at his leisure hours the Bible *only*. He consequently by degrees gives up reading altogether, and passes through life in a state of ignorance which deserves compassion, but which too often admits of no remedy.

As an instance of a taste in children for acquiring knowledge, I may be allowed to mention what lately occurred in the Downham Union workhouse. The boys of the school are under the care of Mr. Dunlop, an excellent trainer from Mr. David Stow's normal seminary at Glasgow. Guardians of the Union, and other visitors, who had been gratified by the proficiency of the boys, had entrusted Mr. Dunlop with little sums of money for their use. The question at length arose, to what purpose was the money to be applied? And Mr. Dunlop, with reliance in the character of the boys with whom he had to deal, referred the

matter entirely to them for their decision. They did not disappoint his expectations by asking for cakes, and tarts, or bats, and balls. Some months before, maps had been purchased for the use of the school, and Mr. Dunlop, by oral instruction, had made them take an interest in what would to some appear the dry study of the names of countries and towns. Accordingly they were anxious to know still more on the subject, and unanimously decided on purchasing books of Geography. It is needless to point out the practical use of a taste for this study; or to remark how much more disposed such boys will hereafter be to emigrate, and push their fortunes in other lands, than the ordinary agricultural labourer who has not the most remote conception where Canada or New South Wales is situated, whose ideas of the latter country are principally connected with Botany Bay; and who has therefore a natural repugnance to settle in a land which he only knows as a place of punishment of sheep-stealers, forgers, and highway robbers.

With regard to the moral effect produced in the character of the children in our best schools, I am inclined to estimate it highly, though this is not a point admitting of strict logical proof. However, I can say with truth that I am not acquainted with any one instance, where a workhouse boy has turned out badly after having been for any length of time under one of our first-rate schoolmasters. Nevertheless, instances to the contrary may from time to time hereafter occur; and yet they would constitute no fair objection to the general system. For although, if a proper method of moral and religious training is adopted in a school, you may calculate with tolerable certainty its influence on the majority of the boys, you cannot extend this to every single individual amongst them. For in individuals there often seems to be a waywardness of will which baffles all calculation, and which resists the training and the admonition of parents, friends, and teachers. And no moral or religious system could stand, if tried by so severe a test.

A pleasing example came under my notice not long ago, in the Walsingham Union, of the confidence which may be safely placed in his pupils by a good schoolmaster. Mr. Smith, from Mr. David Stow's Normal Seminary at Glasgow, who devotes generally the whole of his time and abilities to the instruction of the boys in Great Snoring Workhouse, had obtained permission one day last February to go and assist a neighbouring clergyman in the improvement of a village school. I arrived in the evening at the workhouse altogether unexpectedly, during Mr. Smith's absence, and it so happened that I immediately went into the school-room, when I found the business of the whole school proceeding with as much quiet and regularity as if Mr. Smith had been present. The boys were in classes under their monitors, some reading,

some writing, and some working sums in arithmetic on their slates. Of these boys, who had learned the secret of doing right even when their master's eye was not upon them, the eldest was not above thirteen years of age.

In some of the workhouse schools *singing* has been introduced; and it is highly desirable that this useful part of education should be universally cultivated, as it is in the German schools. However, as the English can scarcely be considered a musical nation, there is a difficulty in obtaining schoolmasters, who, in addition to their other qualifications, possess the accomplishment of singing. The words of the songs are, as is to be desired, principally of a religious cast, and a hymn is sung on entering and on leaving school. But for the most part, care is taken to avoid the great mistake which some trainers are apt to fall into, of teaching *none* but religious songs. It is contrary to the nature of children to sing merely songs of this description; and it is the duty of a wise teacher to supply them with pure and cheerful moral songs, which, though not directly religious, may engage their feelings and strike their imagination, and which they may be able to interweave with their daily employments. Perhaps the best collection of songs for this purpose is Mr. Hickson's Singing Master, a work which enjoys already an extensive circulation, and which may be safely recommended to those who are alive to the benefit which may be drawn from good songs, in moulding the minds of the young.

The elements of drawing are not yet taught in any school in this district, although they would be useful for children intended to be carpenters, bricklayers, or masons. This omission, however, will scarcely excite surprise, for although it is successfully taught in some schools in France and Germany, it has been introduced into very few in England.

In the greater number of schools no rewards are given to the children for good behaviour, but in some they are rewarded by presents of books, by leave to pay visits to relations, or by slight gifts from the chairman or the gentlemen of the visiting committee.

As for chastisements, flogging is rarely inflicted. The ordinary punishments are to make the offender stand alone in the middle of the school room, or to forbid his taking a walk with his companions, or to confine him by himself, or to diminish his allowance of food. The latter mode of punishment, however, seems decidedly objectionable, and in the few instances where severe punishments are necessary (though such instances will be rare in proportion to the skill of the trainer) it would be preferable, in my opinion, to have recourse to the old and orthodox use of birch twigs.

With respect to exercise in the open air, I would observe that the boys are frequently employed in agricultural pursuits in the

workhouse grounds; and both they and the girls are allowed now in almost all the Unions to take walks occasionally, each at distinct times, under the care of the schoolmaster and schoolmistress respectively. On the latter point, encouraged by the recorded opinions of your Board, I have often actively interfered; and I make a point of reminding schoolmasters and schoolmistresses, from time to time, how important it is that the children should not be perpetually confined within the walls of the workhouse. There is the greater necessity for warning on this head, inasmuch as there is reason to suspect that some teachers (though by no means the best ones) are influenced by a dishonourable feeling of false shame at the idea of being seen walking in company with pauper children. Moreover, some members of the Boards of Guardians, without considering that a test is not wanted for the children, as it is for the able-bodied, have manifested an unwillingness to admit of any relaxation of the restraints of the workhouse in favour of the children, and one *ex-officio* guardian,* of superior abilities, has strongly urged to me as an argument against such relaxation, the danger which might result from associating in young minds the idea of pleasure with a residence in the workhouse. He says that grown-up men naturally regard with pleasure the spot where they have passed the happy days of their childhood; and that it is expedient to render the workhouse irksome to the young, in order to deter them from coming back to it in after years. But this argument seems to involve the supposition that mechanical motives have a greater influence on the acts of grown-up persons than those impulses, opinions, and habits which form what is called character. Give requisite liberty to a boy in a workhouse; place him under a first-rate schoolmaster who will teach him that it is degrading and contrary to his duty towards his neighbour to depend for subsistence on the charity of others, who will familiarize his mind with the notion of emigrating, and of not remaining always in one place when wages are low; take care by all these means to give full scope to his natural buoyancy and elasticity of spirits, you thus dispauperize his mind, and you have the best guarantee which can be obtained that such a boy will never return in after years to the workhouse. But if he is subjected to perpetual confinement, and has not an opportunity of seeing trees and green fields, except from the workhouse grounds, there is a risk of crushing the free spirit of a child, and of making him a poor miserable pauperized thing, who when grown up will return, after a short absence, to the chain which so long has bound him, and which use will have made to him a kind of second nature.

With regard to the industrial training of children in the work-

* I think it right to state that this gentleman decidedly advocates the establishment of *district schools*, to which the same objection cannot apply.

house, I regret to say that it cannot be considered to be in a very satisfactory state, although there is a strong and growing conviction of its importance. In many Unions, boys are taught tailoring and shoemaking, so as to be able to make and mend their own clothes and shoes,—in some, they are taught net-making, straw-plaiting, and hat-making, and the performance of various domestic duties, such as white-washing and cleaning windows in the house, and even in painting, when it is required. They are also frequently taught agricultural work in the garden attached to the workhouse. The girls are taught knitting, sewing, and household work, such as to scrub the floors and make the beds, &c. In some Unions, they also wash and iron their own linen; and in the Smallburgh workhouse the eldest girls are taught to brew and bake.

These facts seem to show that the value of industrial training is more or less formally recognised. Nevertheless, there are almost insuperable obstacles to its full development in a perfect shape under existing arrangements. For example, it cannot be expected in small Unions that the Board of Guardians will incur the expense of hiring a shoemaker and a tailor to instruct the workhouse boys; so the plan generally adopted is to take advantage of the services of any pauper tailor or shoemaker who may happen to be in the Union workhouse, and to require such pauper to instruct the children in his own particular trade. But this system is open to grave objections, as exposing the children to the contamination which may result from intercourse with an adult pauper. In fact, it involves a danger of destroying the dispauperizing influence which is exerted by a good schoolmaster. So that, practically, Boards of Guardians are too often reduced to the choice of one of two evils; they must either let the workhouse children be taught useful trades by paupers, or they must forego the idea of having them taught such trades at all. And they have not always the power of making their election even between these two alternatives. For it very frequently happens that there is no pauper shoemaker or tailor in the workhouse; and then of course the question is set at rest.

These difficulties are deeply to be lamented, inasmuch as it seems evident that the hopes of giving a good education to pauper children are bound up with the possibility of devising some plan by which industrial training may be carried on simultaneously with the cultivation of their moral and intellectual faculties. For not only is any system of education in itself essentially imperfect, if it does not include industrial training, but it will be impossible, without such training, to overcome the prejudices of those who contend that book-learning, as it is called, has a tendency to render the working classes unfit for the performance of their duties in life. To such reasoners it is necessary to be enabled to

give a conclusive answer, by appealing to facts: and this cannot be done in any way so effectually as by referring them to institutions in which industrial and intellectual training have reached a high point of development, without either of the two absorbing the other, and in which the same boys who shall undergo a protracted examination in the Bible, and who shall answer difficult questions in arithmetic with an accuracy and readiness unsurpassed by the children of the upper classes, shall also work in the most difficult trades, or perform the most humble menial duties with expertness and alacrity. This combination of industrial with intellectual training is the leading idea of the school at Norwood, and of the normal school for teachers which has been established at Battersea, under the auspices of my colleagues, Dr. Kay and Mr. Tufnell. This idea having been there, partially at least, realized, it is to be hoped that it will, henceforward, never be lost sight of, but that it will be constantly presented to the public mind, both by example and reasoning, until at length the idea shall become a fixed principle and a universally admitted axiom, which shall form the indispensable foundation of every future plan for the education of pauper children.

It is mainly (though not exclusively) from perceiving the impossibility of realizing this idea universally in isolated workhouses that I subscribe most cordially to the proposal for establishing district schools; and on this subject I now wish to offer a few observations as connected with the prospect of improvement in the schools already established.

I am willing to admit that, even supposing no alteration is made in the existing arrangements, there are grounds for anticipating that decided improvements will be gradually introduced into the workhouse schools. If, whenever vacancies occur amongst schoolmasters, attempts are unceasingly made to induce Boards of Guardians to place their schools on a better footing, and, more especially, to raise the salary of their schoolmasters, there is reason to hope that although such efforts may occasionally be rendered unavailing by supineness, inexperience, and false notions of economy, yet ultimately they may be more or less successful. It is the blessing of good, no less than it is the curse of evil, to propagate itself; and a good school, like a good man, exercises a purifying influence on the surrounding ignorance and darkness. Reports respecting it are circulated in the neighbourhood, either in the spirit of praise or of ridicule; and guardians of adjoining Unions are tempted to visit it, impelled, perhaps, at first, by no other feeling than that of a vague curiosity. But even such casual visits are sometimes the harbingers of moral triumphs. For of all objects in nature, attractive and engaging, none is more so than the opening mind of an intelligent child; and lookers-on, the most callous and thoughtless, have a feeling of pleasure when

contemplating many such minds in the process of sympathetic development under the influence of a wise teacher. Accordingly, such visitors, on returning to their homes, are naturally desirous to see established in their own Union something similar to what has given them such pleasure elsewhere; and, as members of Boards of Guardians, they have occasionally, within my own knowledge, been instrumental in working a change for the better in the schools under their own superintendence. In proportion to the gradually increasing number of good schools, similar results, on a large scale, may hereafter be anticipated; and therefore it would be unfair to calculate that the present defective organization of some schools in this district would continue for ever.

But in the present system of workhouse schools there are certain inherent defects, which, although they may be partially counteracted, can scarcely be ever entirely rooted out, and to some of these I proceed to direct the attention of your Board.

In the first place, industrial training must always remain essentially imperfect in the majority of those schools, on account of the expense to a single Union of employing many hired industrial trainers. I have already adverted to industrial training, as an indispensable condition for obtaining support in any plan for improving the intellectual education of pauper children. I will now merely add that, by industrial training, it is not meant that all the children should be taught one and the same trade only, however useful that trade may be. Not to mention that this is open to the objection of interfering unduly with the labour market, it is likewise foreign to the idea of industrial education properly so called. For this idea includes the germ of various trades, professions, and pursuits, and it requires that free development shall be given to the practical impulses and capabilities of the whole man. When, therefore, one peculiar and monotonous bent is assigned to the industry of all the children in one school, the school is turned into a kind of factory, in which the original pliancy of children, and their spontaneous attempts to find out what is best adapted to their nature are checked and marred.

2. In the next place, it is difficult, if not impossible, thoroughly to protect children in a workhouse from evil influences. Whatever care may be taken to separate them from adult paupers, it is not easy to prevent their holding, now and then, conversations with each other. Besides, the two classes rise and go to bed nearly at the same time, they have their meals at the same hour, they eat in the same hall, their food differs rather in quantity than in quality; their dress, their rooms, and their beds are of the same general character, and all these circumstances, minute and unimportant as they may appear at first sight, have nevertheless the effect of making the children feel that they live under the same organized system as the class of full-grown paupers. But

this necessarily communicates to them a certain feeling of pauperism, which is in my opinion a deplorable evil. Paupers they are not and cannot be in any reproachful sense; it is not by their own fault or miscalculation, it is not by their own want of manly forethought and self-denial that they are compelled to be dependent upon parochial bounty. But the feeling of pauperism is in itself, to a well-regulated mind, purely painful, and nothing would justify us in subjecting many thousands of children to its influence except motives of absolute necessity, or proofs that the discipline might tend to promote their future welfare. But it cannot be pretended that there is any *necessity* for it; and as to its promoting their future welfare, this is not only not the truth, but it is absolutely the very reverse of it. They ought, indeed, to be taught to fear pauperism, but this ought to be a moral rather than a mechanical fear; a fear resulting from a good system of religious and moral training, under which they might be launched into the world with unshackled energies, and a spirit of independence rather than the fear of a crouching mind which has been depressed in youth by an experience of the feeling.

3. Moreover there are many obstacles to retaining for Union workhouses the services of efficient schoolmasters.

It is obvious that the efficiency of the schoolmaster is the hinge on which everything turns in a good school. Without it rules and books are of little avail; he is the centre and the soul of the whole system. But the qualifications requisite to form a really good schoolmaster are of a high order, and are not often to be found combined. The foundation of his character should be earnestness, the result of religious feelings, and of a profound sense of duty; for without this prime quality, it is impossible for him deeply to impress the minds of children, who are much more influenced by the contagion of sympathy with an earnest teacher than by any precepts or advice. But although of an earnest temperament, gloominess and austerity should be foreign to his character; for these only make goodness repulsive to children, and too often produce in them a spirit of concealment and falsehood. Notwithstanding his earnestness, he ought to be at the same time cheerful and benevolent,—fond of children, acquainted with the peculiarites of their dispositions, and able to win their confidence. When we add to all this the requisites, high intellectual powers, and skill in teaching, which is in itself a difficult art, it will not excite surprise that there is a considerable dearth of good schoolmasters.

Nothing, however, can be more lamentable than the low notions and grovelling conceptions which prevail respecting what a good schoolmaster ought to be. This is particularly brought to one's notice, by the defective qualification of the majority of candidates for the office of schoolmaster. Their ignorance is often

of the grossest kind, although easily to be accounted for by their former modes of life. Many of them are persons who have failed in business, and who think that, as a last resource, they may turn schoolmasters without previous practice. And such persons are sometimes elected, partly from a feeling of compassion, and partly from an idea that there cannot be any great difficulty in teaching pauper children to read, write, and cipher.

In England, until very lately, there has been no good school for the instruction of teachers: and the village schoolmaster has never had a recognised position, so to say, in society. In Scotland, on the other hand, a normal seminary for teachers has been established some years, and the village schoolmaster is looked up to with respect, as holding a position scarcely inferior to that of the minister himself. In some instances, the same individual is minister and schoolmaster; in others, the minister has been a schoolmaster in early life, and looks back to his former vocation with satisfaction, and certainly without shame.

Under these circumstances, it might naturally be supposed that the Scotch schoolmasters would have more sound and elevated notions of the duties required of them. And this in fact is the case. But still a difficulty arises from some of them entertaining a repugnance to the idea of residing in an English workhouse; and this, although a weakness which no strong-minded man would yield to, sometimes prevails, and in one instance within my knowledge might have occasioned considerable embarrassment. A trainer from Mr. David Stow's Normal Seminary had engaged to accept the office of schoolmaster in one of the workhouse schools of this district, but when the time for his leaving Glasgow arrived, his heart failed him at the idea of living in a workhouse, and he abandoned his original intention. In this particular case, however, owing to the zeal of Mr. David Stow, who exerted himself successfully to supply the place of the defaulter, no practical inconvenience resulted; but I have little doubt that a similar feeling deters some trainers from undertaking at all to perform the duties of workhouse schoolmaster.

But even when a good schoolmaster is once fairly engaged in his vocation within the workhouse, there is constant danger of his falling into disputes with the governor, and of his eventually tendering his resignation. As the causes of the frequent misunderstandings between these two Union officers have been already specified by Mr. Tufnell,* it is unnecessary for me to travel over the same ground. I would, however, observe, that I am acquainted with instances in this district of good schoolmasters and governors living together in perfect harmony, a result which is highly creditable to the mutual forbearance and obliging disposi-

* P. 120 of the Report on the continuance of the Poor Law Commission.

tion of both parties. And when there is an open rupture, I should be unwilling in all cases to lay the blame exclusively on the governor of the workhouse. There are sometimes faults on both sides, and after all, the principal occasions of quarrel arise from the peculiar and anomalous position in which the two officers stand towards each other.

For all these defects there seems to be one appropriate remedy, viz., the establishment of district schools for the combined Unions. In such a system, arrangements might economically be made for hiring teachers of various trades, and for subjecting the children to a complete course of industrial training. As the building prepared for the purpose would be devoted entirely to the pauper children, it would be possible to exclude those evil influences which are almost inseparable from a residence in a workhouse under the same roof with adult paupers. And finally, as the schoolmaster would be the principal officer in the establishment, and would be released from a fear of the unpleasantness which may result from his present subordinate position, superior trainers would feel no reluctance in accepting the office; and to such persons an adequate salary might be afforded, which would leave them without any inducement to consider their situation merely as a stepping-stone to something better. In short, in whatever light the subject is regarded, the proposed establishment of district pauper schools seems to me pregnant with the happiest results.

Such being the apparent advantages of district schools, it may be desirable to consider what objections are likely to be entertained or alleged against them. And these will probably be found to be twofold; viz., a general dislike to the education of the labouring classes, and an assertion of the principle that pauper children ought not to receive a better education than the children of independent labourers. And on both these heads I would offer a few observations.

1. It is impossible to shut one's eyes to the fact that a certain portion of the upper and middling classes harbour a rooted distrust of any plan for the education of the poor. In discharge of my ordinary duties, I have often had an opportunity of seeing this feeling manifested in an undisguised form. In the rural Unions of this district, it fortunately happens that religious dissensions are almost unknown, and religious scruples have only, on very rare occasions, been the cause or the pretext for throwing impediments in the way of education. Hence the chaplains in the majority of the Unions give their valuable assistance in the improvement of the schools; a fact which I take the greater pleasure in acknowledging, inasmuch as, in some Unions, they have almost supplied the place of a good schoolmaster, and it has only been in two instances that the slightest opposition

has been experienced from that quarter. But amongst many small farmers, and some of the gentry, unwillingness to educate the poor is openly defended by argument, and a merchant of a seaport town gravely assured me not long ago, that an agricultural labourer was very little above a brute, and that to educate him would merely have the effect of rendering him dissatisfied with his situation in life. With persons who sincerely hold these views it is useless to reason, and all that can be done is to counteract the spread of their opinions by putting prominently forward, as has been already suggested, the system of uniting industrial with intellectual training.

2. However, the principal argument used against district pauper schools will be derived from the specious principle that you ought not to give pauper children a better education than is usually given to the children of independent labourers. This argument was once carried so far in my presence last winter at a Board of Guardians that a gentleman of property in Norfolk half threatened to bring forward a motion for dispensing altogether with the services of any schoolmaster in the workhouse. And I could not help admitting at the time that this was a strictly logical and self-consistent course for any one to pursue *who felt convinced of the soundness of that principle.*

This argument is generally made use of as an extension by a supposed analogy, of the invaluable principle, that the condition of an adult pauper ought to be made less desirable than that of an independent labourer. This last principle is one which the new Poor Law has placed in a flood of light, and to the realization of which it owes its triumphant success. It is therefore natural that a disposition should exist to apply it by analogy to other cases which have some features of resemblance.

But it seems to me that some of the chief reasons for maintaining this principle, as regards the bodily wants of the adult paupers, almost entirely fail when urged against the improvement of the minds of the pauper children. For example, one main reason why it is unwise to make the condition of a pauper more desirable than that of an independent labourer is, that by such a course it becomes the interest of the pauper to continue in the receipt of parish pay; he is deprived of all ordinary motives for industry and economy, an indefinite burden is cast upon the rate-payers, and the mind of the pauper is hopelessly demoralized. But the superior education of a pauper child has a tendency to render it unwilling to be dependent on the bounty of others, to furnish it with skill for earning its own livelihood in after life, and to dispauperize and elevate its mind. So that precisely the same motives of economy and morality which justify extreme thriftiness in supplying the bodily wants of an adult pauper imperiously demand that in providing the means of mental culture for pauper

children there should be no stint and niggardliness, but that their opening minds should be richly furnished with all that is useful and exalted.

I am aware it may be said that a superior education of the kind proposed might induce able-bodied men to enter the workhouse from regard to the good of their children, and that thus pauperism might *indirectly* be increased. But it must be remembered that the workhouse test would be applied simultaneously in its full force to the parents, and for these to persist in remaining inmates of the workhouse on account of the benefit of their children two things would be requisite, first, that they should have a strong sense of the advantage of a good education, and secondly, that they should be animated by a spirit of self-sacrifice, and disregard of all personal inconvenience when set against the mental improvement of their children. But in ninety-nine cases out of a hundred these feelings would be incompatible with a spirit which could submit to be dependent in idleness on the bounty of the parish; and although such a peculiar combination of qualities in a character is certainly possible, the fear of such a character becoming common seems to me chimerical. Moreover, it should not be forgotten that an able-bodied labourer has *no right* to remain in a workhouse, if work is offered to him at reasonable wages, and thus the parish will always have some protection against such characters, whenever they may endeavour to throw on the poor-rates the burden of maintaining their family.

However, not above one-sixth of the children in a workhouse have able-bodied parents resident in the workhouse at the same time. Nearly one-half are bastards and orphans, so that the last mentioned objections could not be urged against properly instructing these two classes of children. It is true, even with respect to these, that refined arguments might be used against giving them a good education, such, for example, as maintaining, in the case of orphans, that it would take away all motives from parents for providing in their life-time for the contingency of their deaths, and that it would also diminish the claim of orphans on their collateral relations for sympathy and protection. But without meaning to assert that there is no weight whatever in such reasonings, I submit that they are decidedly counterbalanced by arguments on the other side, and that in a matter of such paramount importance, which is a question of intellectual and spiritual life or death to many thousands of children, it would be a species of pedantic trifling—it would be like fiddling while Rome is burning—to allow the possibility of abuse and of expense to some parishes in individual cases to prevail against the adoption of a measure which cannot but exercise a beneficial influence on the vast mass of our youthful pauper population.

In conclusion, I wish to draw attention to the coincidence of

your having instituted inquiries into the education of pauper children, at the same time that you are collecting information as to the state of the streets and of the dwellings in which the poor reside; with the view, in both cases, of introducing improvements by giving additional powers to Boards of Guardians. The two subjects, though in many respects dissimilar, are in some points strictly analogous. It appears that a great proportion of the fevers and other sickness with which the poor are afflicted is owing to narrow streets, ill-ventilated houses, imperfect drainage, and stagnant filth; in fact to circumstances which man has the power to control. Although, therefore, the new Poor Law enables Boards of Guardians to supply ample medical relief to the poor when ill, you deem that prevention is better than cure, and have under consideration various plans for striking at the root of the evil by removing or mitigating the above-mentioned causes of disease and death. In like manner there is reason to believe that half the pauperism and crime which prevails in the world arises from the corruption of stagnant ignorance, and from defective moral and religious training, and that to remove and remedy these causes of vice is the only expedient which affords the least prospect of success for promoting the moral health of the rising generation. Hence, you do not regard it as sufficient to check pauperism in grown-up persons by means of a mechanical and self-acting test, but you desire to preserve the children of paupers from the contagion of that mental pestilence, by rescuing them from the evil influence of bad example, and by causing them to dwell in the pure atmosphere of a well-regulated school.

The establishment of pauper district schools under boards of management will furnish in my opinion the best means of effecting that object, and of thus training the children of the most unfortunate and degraded portion of the community in habits of intelligence, industry, and goodness.

I am, Gentlemen,

Your obedient servant,

EDWARD TWISLETON,

Assistant Poor Law Commissioner.

To the Poor Law Commissioners,
&c. &c. &c.

IX.

REPORT ON THE TRAINING OF PAUPER CHILDREN IN WORKHOUSES AND DISTRICT SCHOOLS.

By Sir EDMUND HEAD, Bart., Assistant Poor Law Commissioner.

GENTLEMEN, *Ross, 10th May,* 1840.

I HAVE the honour to reply to your circular of February 3rd, relating to pauper children in the workhouse schools of my district.

With regard to the state of instruction of children in the workhouses of my district before the formation of Unions under the Poor Law Amendment Act, I much fear that I can offer but little information. Of the thirty-five Unions which now compose my district, eight only were formed by myself. Consequently I am entirely ignorant of the former management of the remaining twenty-seven.

The only workhouses which existed in the eight Unions formed by me were, one in Leominster, two in the city of Hereford, one in Ross, and one in Upton Bishop parish, now in the Ross Union. I rather think that in Leominster the children who happened to be in the house sometimes attended a school out of its walls, but in no one of the above workhouses was there any *classification* or *instruction* of any kind. Indeed the number of inmates receiving in-door relief was exceedingly small.

With reference to the present state of this class of inmates, I subjoin a tabular statement of the number of children, divided according to the form transmitted from your office, who were resident in the workhouses of my district on the 1st of March last. It seems that the bastard children are to the whole number as 405 to 1000. The bastards, orphans, and deserted children, (omitting seven deserted by mothers and not by fathers,) being the classes likely to depend permanently on the parish until old enough to get their own bread, are together as 711 to 1000.

It is, however, quite needless for me to dwell on the importance of properly educating this helpless portion of our population, since the principle has been so ably advocated by Dr. Kay and Mr. Tufnell, and admitted by your Board.

I may state generally, that although the classification in most of my workhouses is tolerably complete, yet it is absolutely impossible to hinder all contact between the adult paupers and the children. In assisting in the household work the elder girls must occasionally be in contact with able-bodied women similarly employed. I have from time to time laid great stress on the importance of their separation; but even when I am assured by the master and matron that they do their utmost to prevent it, I feel almost certain that it must sometimes occur. I believe the only remedy for this most serious evil would be separate establishments for the children.

In general, I am sorry to say that well-trained teachers are not engaged in the workhouses of my district; the salaries being wholly inadequate to remunerate persons so qualified if they could be procured. At the same time considerable changes for the better have gradually been made. At Tewkesbury the former schoolmaster was a shoemaker, who taught little or nothing besides his trade; at my suggestion they made him porter, putting from time to time two or three of the elder boys to work with him, and engaged another schoolmaster, who comes for a certain number of hours in the day, and instructs the boys in reading writing, &c. At Chepstow we have lately got a young schoolmistress, (most of the children being small,) who promises exceedingly well; but I regret to say the prejudices of the farmers are such that it was with great difficulty, and only by referring to the workhouse rules, that the point was carried of writing being taught at all. At Cheltenham, where the guardians were willing to give a fair salary, and where the children are in a separate workhouse, we had some difficulty in obtaining a master, and the one who is now there threatens to leave, although his salary is 35*l.* per annum, with board, lodging, and washing. The state of instruction and of moral discipline under his care is far better than under the former master.

The average salary of a schoolmaster in my district does not, I regret to say, exceed 20*l.* to 25*l.* There are but few employed, and this is for the most part *exclusive* of board, which is not allowed. It is absolutely impossible to obtain efficient services for such remuneration. The schoolmistress generally receives about 15*l.* a-year, with board and lodging. Some of the more respectable schoolmistresses have had repeated disagreements with the matrons of the workhouses in which they are employed. If the schoolmaster is properly qualified for this situation, he is better instructed, and altogether of a higher class than the master of the workhouse. Yet the master must be supposed to control the whole establishment. A good teacher, therefore, being placed under the orders of a man of inferior grade to himself, must either submit in silence to whatever he may experience, or disagree with the superior officer. Such a relation can produce nothing but dissatisfaction to both parties, and disadvantage to their employers.

With regard to the general organization of schools in my workhouses, it is most imperfect, and no persuasion will, I feel confident, induce the guardians in *rural* Unions to go to the necessary expense to give it efficiency. Accordingly there is a general complaint of the difficulty of getting places for boys, even with an outfit of clothes of the value, perhaps, of 30*s.* to 2*l.*, when the boy is first hired.

I feel, in forwarding this report, that it presents, on the whole, an unsatisfactory picture, although some improvements have been effected. It is, however, to be observed that, as compared with the neglected state in which pauper children lived before the

Poor Law Amendment Act, even the present imperfect instruction and classification is a change greatly for the better. They *are* taught and they *are* brought up in decent and orderly habits. The mass of children dependent on parish relief has not been increased, though its magnitude is more visible from their being brought together. As far as we have gone we have effected no

—	Cheltenham.		Gloucester.		Newent.		Tewkesbury.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1. Bastards	18	9	8	11	11	3	11	8
2. Orphans	16	12	6	5	4	1	9	5
3. Children deserted by father	13	13	2	2	..	..	3	5
4. Children deserted by mother, and whose fathers are resident out of the Union workhouse, but have not deserted them.	..	..	..	..	..	..	..	..
5. Children deserted by father and mother.	1	7	..	..	2	1	..	..
6. Children of men undergoing punishment for crime.	3	3	..	..	..	..	4	5
7. Children of persons dependent on parochial aid on account of mental or bodily infirmity.	2	4	5	4	..	..	..	..
8. Children of able-bodied widows resident in Union workhouse.	..	..	5	..	9	4	7	4
9. Children of able-bodied widows resident out of Union workhouse.	1	2	..	..	1	1	..	..
10. Children of able-bodied widowers resident in Union workhouse.	..	..	..	..	..	..	..	..
11. Children of able-bodied widowers resident out of Union workhouse.	..	..	2	1	2	1	..	..
12. Children of able-bodied parents who are resident in the Union workhouse with their children.	1	2	2	4	5	13	..	..
13. Children belonging to large families, of able-bodied fathers, admitted into the workhouse as relief to parents.	..	..	..	..	..	..	2	..
14. Children not included in either of the above classes.	..	..	..	2	..	..	3	1
Total of Boys . .	55	..	30	..	31	..	39	..
Total of Girls . .	..	52	..	29	..	24	..	28

evil and have done much good. If, however, the instruction of this numerous class is to be properly carried out, if they are to be effectually saved from future pauperism and vice, district schools and nothing else must be looked to as the means. I have the honour to be, Gentlemen, your obedient servant,

EDMUND HEAD.

Westbury.		Winchcomb.		Bromyard.		Dore.		Hereford.		Kington.		Ledbury.		Leominster.	
Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
6	6	3	2	20	18	6	10	16	16	16	4	16	22	11	13
1	..	..	..	..	4	..	1	9	11	..	..	4	3	1	..
7	6	..	..	..	1	2	1	2	1	1	2	6	3	1	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	1	..	..	4	5	6	..	..	..	..	..
2	..	1	3	..	..	..	..	6	4	..	..	..	..	2	..
..	..	..	..	2	2	2	1	7	..	..	..	5	2	..	..
..	..	1	1	5	6	..	..	..	..	..	..	1	2	..	..
3	..	..	..	..	..	1	3	..	..	2	2	..	..	1	..
..	..	..	..	3	2	..	..	3	1	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	1	2	..	..	2	..
..	..	..	..	..	..	..	..	3	3	4	2	..	..	2	1
..	1	..	..	..	..	..	..	..	..	..	..	1	4	2	1
..	..	..	..	1	..	..	..	..	..	8	3	2	..	..	..
19	..	5	..	31	..	11	..	50	..	38	..	35	..	22	..
..	13	..	6	..	34	..	16	..	41	..	15	..	36	..	16

—	Ross.		Weobly.		Abergavenny.		Chepstow.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1. Bastards	11	14	7	8	4	3	5	6
2. Orphans	5	7	1	1	..	..	7	4
3. Children deserted by father	4	4	5	3	4	3	6	2
4 Children deserted by mother, and whose fathers are resident out of the Union workhouse, but have not deserted them.	1	..	..	..	..	..	..	..
5. Children deserted by father and mother.	..	..	..	..	3	3	..	..
6. Children of men undergoing punishment for crime.	1	1	..	..	..	..	1	..
7. Children of persons dependent on parochial aid on account of mental or bodily infirmity.	..	2	..	..	..	..	3	3
8. Children of able-bodied widows resident in Union workhouse.	..	..	..	..	..	..	..	..
9. Children of able-bodied widows resident out of Union workhouse.	..	..	1	1	..	..	..	..
10. Children of able-bodied widowers resident in Union workhouse.	..	..	4	2	..	..	..	..
11. Children of able-bodied widowers resident out of Union workhouse.	..	..	..	..	..	..	..	..
12. Children of able-bodied parents who are resident in the Union workhouse with their children.	6	2	..	..	..	..	..	..
13. Children belonging to large families, of able-bodied fathers, admitted into the workhouse as relief to parents.	..	..	..	..	..	..	..	..
14. Children not included in either of the above classes.	1	2	..	1	..	..	1	2
Total of { Boys . .	29	..	18	..	11	..	23	..
Total of { Girls . .	..	32	..	16	..	9	..	17

Monmouth.		Newport.		Pontypool.		Cleobury Mortimer.		Ludlow.		Bromsgrove.		Droitwich.		Evesham.	
Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
15	10	5	4	2	2	11	10	20	34	14	17	11	13	2	4
4	4	3	3	..	..	1	1	4	3	2	6	4	4	3	2
4	9	2	1	..	..	2	..	3	7	..	1	3	3	..	..
..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..
..	..	1	..	..	..	..	..	..	..	1	1	..	..	..	..
..	..	..	..	..	1	..	..	3	..	3	1	..	..	..	..
..	..	..	..	..	..	..	..	1	..	..	..	2	3	..	..
6	7	1	1	..	..	1	2	1	4	1	..	1	..	..	..
..	1	..	..	..	..	..	..	..	..	1	..	..	..	1	3
..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..
..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..
..	..	..	..	..	..	..	..	6	3	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	3	..	..	2	..	1	..	1	3
29	..	12	..	2	..	15	..	38	..	24	..	26	..	7	..
..	31	..	10	..	3	..	16	..	54	..	26	..	24	..	12

—	Kidderminster.		Markey.		Pershore.		Stourbridge.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1. Bastards	9	9	6	17	10	10	8	8
2. Orphans	11	10	7	6	4	5	..	1
3. Children deserted by father	4	8	..	..	4	3	8	6
4. Children deserted by mother, and whose fathers are resident out of the Union workhouse, but have not deserted them.	..	1	..	..	..	..	..	..
5. Children deserted by father and mother.	3	3	8	7	2	2	1	1
6. Children of men undergoing punishment for crime.	2	5	2	1	..	..	1	3
7. Children of persons dependent on parochial aid on account of mental or bodily infirmity.	4	6	..	..	..	..	..	..
8. Children of able-bodied widows resident in Union workhouse.	2	1	1	..	..	..	1	1
9. Children of able-bodied widows resident out of Union workhouse.	2	..	..	..	1	2	..	1
10. Children of able-bodied widowers resident in Union workhouse.	..	..	..	1	..	..	..	..
11. Children of able-bodied widowers resident out of Union workhouse.	2	3	..	..	..	..	..	..
12. Children of able-bodied parents who are resident in the Union workhouse with their children.	2	3	..	..	4	1	2	1
13. Children belonging to large families, of able-bodied fathers, admitted into the workhouse as relief to parents.	3	1	..	..	..	..	..	..
14. Children not included in either of the above classes.	..	..	..	..	..	3	..	..
Total of Boys . .	44	..	24	..	25	..	21	..
Total of Girls . .	..	50	..	32	..	26	..	22

Tenbury.		Upton.		Worcester.		Crickhowell.		Hay.		Knighton.		Total of each Class.	Parts in 1,000, omitting Fractions.
Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.		
10	2	8	1	20	9	..	3	8	3	7	10	654	405
1	..	7	5	3	15	1	..	2	..	1	3	243	150
..	1	1	2	5	4	..	..	1	4	..	..	189	117
..	..	..	2	..	..	..	..	..	..	..	..	7	4
..	..	..	1	..	..	..	..	..	..	..	..	64	39
..	..	..	..	..	..	..	..	..	..	..	..	58	35
..	3	..	..	..	..	..	..	..	..	4	..	67	41
2	1	..	1	3	4	..	..	..	..	4	3	94	58
..	..	..	..	3	1	..	..	..	..	..	..	35	21
..	..	..	..	1	3	..	..	..	..	..	..	23	14
..	..	..	2	..	..	..	..	..	..	..	..	21	13
..	..	..	..	7	12	..	..	..	..	6	4	101	62
..	..	..	..	..	2	..	..	..	..	..	..	17	10
1	..	..	..	..	..	..	..	..	..	..	..	41	25
14	..	16	..	42	..	1	..	11	..	22	..	Boys .	803
..	7	..	14	..	50	..	3	..	7	..	20	Girls .	811
								Totals .		.	.	1,614	1,614

X.

REPORT ON THE EDUCATION OF PAUPER CHILDREN IN THE NORTH OF ENGLAND.

By A. Power, Esq., Assistant Poor Law Commissioner.

GENTLEMEN, *Prescot, 20th May,* 1840.

I BEG to submit to your Board the following report upon the provision made for the education of the pauper children in the workhouses of this district, as supplementary to my report of the 20th February last on the same subject.

The information which I have obtained regarding the various classes of children between the ages of three and fourteen in the workhouses has been arranged and tabularized from the several returns in a manner very convenient for reference.

It appears from these returns that there are nearly 1,600 children of both sexes in the workhouses of twenty-one out of the twenty-seven Unions in my present district, the latter number being exclusive of the Rochdale and Bury Unions, which are not yet under the administration of the guardians.

The provision as yet made for the education of these children is very defective in several of the Unions, owing principally to the short time during which many of them have been in operation, and to other causes alluded to in my former report.

This deficiency consists—

1. In the want of proper premises for the classification, instruction, and employment of the children.
2. The want of proper instructors.

It is probable that on the revival of trade the guardians of most of these Unions will not hesitate to make the necessary outlay for the improvement of the present buildings or the erection of new ones, as the case may be; and on proper accommodation being provided for the children, there is no reason to doubt that the propriety of obtaining efficient instructors will also be acknowledged.

In the mean time, there is not an entire absence of instruction in any of these workhouses; but the way in which it is carried on in many of them is much the same as previously to the introduction of the new system of management. One or more of the better-informed of the pauper inmates takes the office of schoolmaster or schoolmistress, and the instruction given by these persons is almost invariably confined to spelling and reading. Good progress is, however, not unfrequently made by some of the children in this manner, as they are made to apply to it with more

constancy and regularity than the children of independent parents who attend the National and other day-schools.

The principal industrial employments found for the children within the workhouses are knitting, and setting them, when old enough, to the hand-loom. The latter occupation is now chiefly valuable as fitting the children in some degree to attend to the power-looms when they leave the workhouse.

In some of the Unions enumerated in the annexed Table a more advanced system of instruction has been adopted, and in others arrangements are in progress which will lead to the same results.

1. In the Kendal Union very great attention is paid to the moral and religious education and the industrial training of the children. A schoolmistress is appointed, with a salary, to each of the workhouses at Kendal and Milnthorpe. Not only reading, but writing, arithmetic, and geography are taught, and general information given in various branches of knowledge.

2. In Ulverstone Union a proper classification of the children has been provided, by the erection of a new workhouse, and they are sent daily to the National school; but I believe it is in the contemplation of the guardians to appoint a person with a salary to instruct the children in the house.

3. In the West Derby Union a schoolmistress has been appointed, with a salary, to instruct the children in reading and writing. Previously to the formation of the Union the children were taught reading only by one of the inmates. When the new workhouse, which is now in progress, is completed, a proper classification, with sufficient school-rooms, will be provided.

4. Halifax Union.—The new workhouse, capable of containing 600 inmates, is completed, and now in occupation. Excellent school-rooms and yards have been provided for the two classes of children, and a schoolmistress has been appointed to instruct them in reading, writing, knitting, sewing, &c.

5. Prescot Union.—One of the three workhouses now in use is appropriated exclusively to the children, who are instructed by the master and matron in reading, writing, and arithmetic.

6. Ormskirk Union.—A schoolmistress has been appointed to instruct the children in spelling, reading, sewing, &c. An alteration of the workhouse, for the purpose both of enlargement and better classification, is in progress.

7. Warrington.—The children go both to the National and Sunday-schools, and their instruction extends both to writing and arithmetic. There is no proper classification as yet provided for the children in this workhouse.

8. Chorley Union.—There is a good school in Leyland workhouse, established and attended to by the vicar of that parish,

who is an ex-officio guardian of the Union, but the schoolmaster is a pauper.

9. Preston.—It is in contemplation to give up three of the four workhouses now in occupation, and to concentrate the whole at Preston, either by building a new workhouse, or by purchasing the Preston workhouse, and enlarging and adapting it to the purposes of classification. A negotiation to this effect is now pending betwixt the Union and the township. In either case suitable provision will be made for the education and classification of the children.

10. Fylde Union.—The guardians have resolved to purchase Kirkham workhouse; and the plans for enlarging and altering the workhouse to provide school-rooms and yards for the children, and are now under consideration.

11. Burnley.—The guardians have determined on a plan for adapting Burnley workhouse to the purposes of classification, and proper provision will then be made for the education of the children. At present they are taught reading by an inmate.

12. Lancaster.—It has been determined either to build a new workhouse or to purchase and enlarge the Lancaster workhouse on an approved plan.

13. Settle Union.—The children are taught reading only by an inmate, but provision is about to be made for instructing them in writing also.

14. Skipton.—A new workhouse, upon an authorized plan, with proper departments for the children of either sex, is now in progress.

I have given a very general sketch of the system of educating pauper children in the workhouses in the several Unions in this district, both before and since the introduction of the new system of management, and I have particularized those Unions in which improvements have already been introduced by the guardians, or are now in progress.

I beg to repeat, in conclusion, my belief that the guardians of those Unions in which similar steps have not yet been taken, will, on the revival of a healthy state of trade, not hesitate to make the necessary outlay for effecting the purposes in question.

I am, gentlemen,

Your very obedient servant,

A. POWER

Numbers and Classes of Children between the Ages of Three and Fourteen Years.		Kendal.	Ulverstone.	Lancaster.	Fylde.	Clitheroe.	Burnley.	Blackburn.	Preston.
1. Bastards	Boys	28	12	3	2	11	14	18	18
	Girls	18	20	3	3	2	4	5	14
2. Orphans	Boys	12	7	9	2	6	2	1	22
	Girls	9	1	..	1	2	2	3	11
3. Children deserted by father	Boys	13	4	8	1	6	3	7	19
	Girls	11	5	1	3	4	..	3	15
4. Children deserted by mother, and whose fathers are resident out of the Union workhouse, but have not deserted them .	Boys	3	..	..	..	2	..	..	..
	Girls	8	..	..	..	..	..	..	..
5. Children deserted by father and mother . . .	Boys	3	..	..	..	2	2	..	5
	Girls	4	..	1	..	..	3	..	5
6. Children of men undergoing punishment for crime.	Boys	7	..	..	..	3	4	..	13
	Girls	7	..	..	..	..	2	..	8
7. Children of persons dependent on parochial aid on account of mental or bodily infirmity . . .	Boys	9	..	..	..	..	2	..	5
	Girls	8	2	1	1	..	6	..	..
8. Children of able-bodied widows resident in Union workhouse	Boys	7	1	7	..	..	..	3	24
	Girls	7	1	4	..	2	..	2	10
9. Children of able-bodied widows resident out of Union workhouse . .	Boys	2	..	3	2	..	1	..	..
	Girls	2	..	1	..	..	..	..	..
10. Children of able-bodied widowers resident in Union workhouse . .	Boys	5	3	1	..	3	..	1	4
	Girls	3	1	1	..	4	..	3	1
11. Children of able-bodied widowers resident out of Union workhouse . .	Boys	4	..	3	1	..	..	..	1
	Girls	5	..	5	2	..	..	..	1
12. Children of able-bodied parents who are resident in the Union workhouse with their children . .	Boys	18	4	14	4	3	14	11	17
	Girls	12	5	11	5	2	8	9	16
13. Children belonging to large families of able-bodied fathers admitted into the workhouse as relief to parents	Boys	1	1	..	1	..	..	..	..
	Girls	2	..	..	..	..	..	..	..
14. Children not included in either of the above classes	Boys	..	..	..	..	3	..	..	3
	Girls	..	..	..	..	4	..	..	3
Total . .	Boys	112	32	48	13	39	42	41	131
	Girls	96	35	28	15	20	25	25	84
Total both sexes .		208	67	76	28	59	67	66	215

Numbers and Classes of Children between the Ages of Three and Fourteen Years.		Chorley.	Wigan.	Leigh.	Ormskirk.	Warrington.	West Derby.	Haslingden.	Settle.
1. Bastards	Boys	10	10	12	16	11	4	5	5
	Girls	8	4	9	6	9	6	1	2
2. Orphans	Boys	6	9	7	4	8	14	..	5
	Girls	3	4	4	3	6	15	..	4
3. Children deserted by father	Boys	6	14	13	3	7	7	..	2
	Girls	4	8	2	7	5	15	1	4
4. Children deserted by mother, and whose fathers are resident out of the Union workhouse, but have not deserted them	Boys	..	..	1	..	3	..	..	..
	Girls	..	..	..	..	1	..	..	..
5. Children deserted by father and mother. . .	Boys	..	..	3	..	..	..	..	..
	Girls	..	2	..	..	1	3	..	..
6. Children of men undergoing punishment for crime	Boys	..	6	1	1	2	..	1	3
	Girls	..	..	1	3	2	..	2	4
7. Children of persons dependent on parochial aid on account of mental or bodily infirmity . . .	Boys	9	2	3	..	2	..	..	..
	Girls	6	1	3	1	..	1	..	..
8. Children of able-bodied widows resident in Union workhouse	Boys	10	3	2	1	1	3	1	3
	Girls	6	3	3	1	1	2	..	4
9. Children of able-bodied widows resident out of Union workhouse . .	Boys	6	..	..	..	..	2	..	..
	Girls	4	..	..	..	..	..	..	..
10. Children of able-bodied widowers resident in Union workhouse . .	Boys	7	..	3	..	..	..	..	4
	Girls	3	..	3	..	1	..	..	2
11. Children of able-bodied widowers resident out of Union workhouse . .	Boys	..	..	..	..	2	..	2	2
	Girls	..	..	..	..	..	..	..	4
12. Children of able-bodied parents who are resident in the Union workhouse with their children . .	Boys	5	5	19	9	1	..	..	1
	Girls	3	5	13	8	2	..	..	3
13. Children belonging to large families of able-bodied fathers, admitted into the workhouse as relief to parents	Boys	..	..	..	..	..	..	..	..
	Girls	..	..	..	..	..	..	..	..
14. Children not included in either of the above classes	Boys	..	..	4	..	6	..	..	1
	Girls	..	..	3	..	1	..	..	1
Total . .	Boys	59	49	68	34	43	30	9	26
	Girls	37	27	41	29	29	42	4	28
Total both sexes .		96	76	109	63	72	72	13	54

Halifax.	Keighley.	Bolton.	Garstang.	Prescot.	Huddersfield.	Sedburgh.	Bootle.	Todmorden.	Runcorn.	Skipton.	Totals.		Totals of the several Classes, including both Sexes.	
6	9	13	6	20	No return; the Huddersfield workhouse not being in possession of the guardians.	No return asked for; the number being inconsiderable.	The same.	No return asked for; there being no workhouse.	The same.	No return made, and this not accounted for. The number very small, the workhouse being very insufficient; but a new one is in progress.	233	Boys	384	Class 1
10	4	10	3	10							151	Girls		
4	8	10	1	14							152	Boys	238	,, 2
5	..	4	..	9							86	Girls		
2	1	2	..	4							122	Boys	224	,, 3
4	3	4	..	3							102	Girls		
..	..	1	..	..							10	Boys	19	,, 4
..	..	..	..	..							9	Girls		
..	..	..	..	2							17	Boys	38	,, 5
1	..	..	..	1							21	Girls		
..	..	..	..	1							42	Boys	71	,, 6
..	..	..	..	..							29	Girls		
..	..	..	..	1							33	Boys	64	,, 7
..	..	1	..	..							31	Girls		
2	3	6	..	5							82	Boys	133	,, 8
..	1	4	..	..							51	Girls		
..	..	..	..	4							20	Boys	27	,, 9
..	..	..	..	..							7	Girls		
..	..	..	..	..							31	Boys	53	,, 10
..	..	..	..	..							22	Girls		
..	..	3	..	..							18	Boys	37	,, 11
..	..	2	..	..							19	Girls		
3	4	..	9	13							154	Boys	264	,, 12
2	2	2	2	..							110	Girls		
..	..	..	..	..							3	Boys	5	,, 13
..	..	..	..	..							2	Girls		
..	..	2	..	..							19	Boys	32	,, 14
..	..	1	..	..							13	Girls		
17	25	37	16	64							935	Boys	1588	.. Total.
22	10	28	5	23							653	Girls		
39	35	65	21	87							1588			

GENTLEMEN, *Preston, 20th February*, 1840.

I HAVE received your circular letter of the 3rd instant, requiring from me a report respecting the state of the workhouse schools in my district.

I conceive from the terms in which this letter is framed that it applies rather to those districts in which Union workhouses with separate departments for pauper schools have been for some time past established and in full operation.

Although much improvement in this respect has already been introduced into most of the workhouses in this district, the arrangements affecting it can scarcely be said to be anywhere complete; for although several Union workhouses are in course of erection, there are none as yet quite finished, excepting that of the Ulverstone Union.

I may add that the proposition of establishing pauper schools on an extended scale, as set forth in the Fourth and Fifth Annual Reports of your Board, is one which I have frequently heard mentioned with approbation by the guardians in this district; and the probability of the requisite powers to effect this object being obtained from the Legislature at some early period has several times been urged as an argument against making any extraordinary provision on the part of separate Unions for the education and training of the pauper children at the present time, and until it shall be seen what Parliament will do.

The agitation and excitement which for some time prevailed in this district on the subject of separating children from their parents, with a view to their better training and education, is fast giving way to more enlightened views in the several Boards of Guardians; but the unpopularity of adopting such arrangements heretofore has had the effect in some places of too long postponing their introduction. In such cases, however, much useless expenditure will have been avoided should Parliament now determine to grant the further Union powers which are requisite for conducting the classification of paupers on a more extended scale.

As to the arrangements which are now existing in the several Unions in this district for the education of pauper children, I shall be glad to afford your Board every possible information upon the numerous points adverted to in the circular of the 3rd February, if your Board should still think it desirable for me to pursue the investigation in this district.

In that case I have to request that thirty copies of the circular letter, and also of the form of return which accompanied it, may be supplied from the office for my assistance in making the inquiry.

I am, gentlemen,
Your very obedient servant,
A. POWER.

XI.

REPORT ON THE TRAINING OF PAUPER CHILDREN IN WORKHOUSES AND DISTRICT SCHOOLS.

By EDWARD SENIOR, Esq., Assistant Poor Law Commissioner.

GENTLEMEN, *Grantham, 16th March,* 1840.

IN compliance with your instructions, dated the 3rd February, 1840, in which I am directed to report on the state of the workhouse schools in my district, I desire to state,—

1st. That under the previous poor law the children in the workhouses were neither taught nor trained; they were usually placed under the care of an elder pauper, frequently himself unable either to read or write, who was directed to look after them, and whose duties consisted in preventing the children from committing acts of mischief. So soon as the children reached the proper age, they were bound out as apprentices—always *out* of their own parishes—with a considerable premium, and thus the main object of the parochial authorities was obtained, the getting rid of the burthen.

More rarely the system of compulsory apprenticeship was adopted, and the different rate-payers were compelled, in turn, to take the pauper children, or to pay a fine; the latter alternative was generally preferred, until the collective amount of the fines tempted some needy tradesman to take them off the parish. The children had no motives to qualify themselves for service, which they disliked; the parochial authorities no interest in making them good members of society, the apprenticeship premium being the cure for all the difficulties.

The children mixed with the adult, and too generally profligate, inmates; the boys naturally preferred the more exciting conversation of the poacher or the smuggler, and the girls that of the abandoned females. No attention was paid to the religious education of the children.

Neither in the incorporations which were formed under Gilbert's Act did a better system prevail; there was no separate classification for the children, and I am not aware of any instances where a salary was given to the schoolmaster.

With all the defects of the present workhouse system of education, it is unquestionably a great improvement on the previous management.

A schoolmaster or schoolmistress, or both these officers, have been appointed in almost every Union in the district under my care, and the children are to a great extent separated from the adults.

The children of both sexes are taught to read and write, and a knowledge of arithmetic is imparted to them.

The boys are employed in cultivating the workhouse grounds, and the girls are brought up to household employments.

The system of instruction adopted is usually that of the National School Society.

The Bible is in almost all the schools the only class-book, and the schools are deficient in the necessary elementary works on education, and corporal punishments are still in use; no system of rewards has hitherto been found practicable.

Both sexes receive a careful religious education under the care and superintendence of the chaplain.

Great difficulties, however, exist in completely separating the children of both sexes from the adults.

It is absolutely necessary that the boys should, as far as possible, be trained to become either agricultural labourers, or acquire a knowledge of trade.

It is impossible to employ them in working on the workhouse lands, or in the performance of menial offices, without the risk of their contamination from the other inmates; and this difficulty is increased with reference to the girls, whose probability of obtaining a place and going to service depends on their general usefulness and knowledge of cookery and household matters, as both in the kitchen and in the other offices they must mix and associate with females of bad character.

In the almost conventual seclusion of the workhouse, the danger of evil consequences resulting from this association is much increased, as both sexes of children must form their standard of persons generally from those they see around them, and these are unfortunately the very outcasts of society.

Notwithstanding all these impediments, places are obtained without much difficulty for the children, and it is the general impression that they are found to be tolerably good servants.

No premiums are ever given with them on going to service; an equipment of clothing is, however, furnished.

Much of my attention has been turned to the present very imperfect industrial education, and I was desirous that the boys should acquire a knowledge of handicrafts, and that separate wash-houses and other offices should be erected for the girls; and with the correctness of these views the guardians generally concurred, but were deterred by the expense to be incurred for so small a number of children.

It appears that in thirty-six (I have omitted that of Billesdon as being too small to be considered in the calculation) Unions the average number of children in each is 72, the total number 2,622.

Those under the first, second, third, fifth, and seventh heads in the accompanying Table, marked A, may be considered permanent inmates, and form rather more than two-thirds of the whole number.

The schoolmasters and schoolmistresses in the Union houses are usually very incompetent, and are frequently persons who

have been unsuccessful in some other calling, and who have not been educated or brought up with the view of their becoming instructors.

Respectable candidates will not submit to the restraint of the workhouse, joined to the circumstance of their being under the control and authority of the master of the workhouse, and the fact of their being either compelled to take their meals alone, or to share them with the inferior officers.

Separate apartments for these officers are usually, but not always, provided for them.

The average salary in my district (Table D) for a schoolmaster, where there is no schoolmistress, appears to be 18*l.*

For a schoolmistress, where there is no schoolmaster, (Table E,) 16*l.*

Average aggregate salary when both are employed, (Table C,) 47*l.*

Average sum paid to instructors in the thirty-one Unions, (Table B,) 36*l.*

During the last year I visited Scotland, with the view of making myself acquainted with the several methods of instruction made use of there, and endeavoured to obtain candidates for the office of workhouse schoolmaster; the terms, however, they required were so high, and the preliminary stipulation of being placed on a par with, and dining with, the masters of the workhouses, have hitherto prevented my obtaining any candidates from that country.

Not unfrequently the struggle between these officers leads to a collision; and during the last six months I have been engaged in assisting the guardians in inquiring into recriminatory charges which have been brought by these officers in two Unions, Spalding and Holbeach, which led in the former instance to the resignation of both officers, and in the latter will yet, I fear, interfere with the discipline of the establishment.

Under these circumstances I have no hope of being able to effect a further improvement on the present system, unless power be given to the Commissioners to unite Unions for the education and management of the children belonging to them, with a joint Board of Management, elected by the several Unions. I feel persuaded that such a system would not only be followed by an improvement in the education of the children, but would also effect a considerable pecuniary saving in the establishment charges from the diminution in the number of schoolmasters and schoolmistresses.

I have the honour to be,
Gentlemen,
Your obedient servant,
EDWARD SENIOR,
Assistant-Commissioner.

TABLE A.—A Return showing the number of Children in the Workhouses in
of the Quarter

Name of Unions.	1. Bastards.		2. Orphans.		3. Children deserted by Father.		4. Children deserted by Mother, and whose Fathers are resident out of the Workhouse, but have not deserted them.		5. Children deserted by Father and Mother		6. Children of Men undergoing punishment for Crime.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1. Ashby-de-la-Zouch	14	9	1	2	3	4	..	..	3	..	7	6
2. Barrow-on-Soar	4	5	..	..	4	3	..	..	1	1	8	7
3. Basford	30	26	8	5	5	1	..	..	2	1	2	1
4. Bingham	7	8	2	2	..	..	..	..	..	..	..	..
5. Blaby	2	1	3	4	3	3	..	..	..	..	1	1
6. Boston	34	23	12	8	9	7	..	..	2	3	3	5
7. Bosworth Market	3	2	1	3	1	2	..	..	..	..	1	1
8. Bourne	7	14	5	5	4	3	..	..	..	..	2	2
9. Caistor	19	14	..	1	15	7	..	..	1	3	2	1
10. East Retford	8	3	4	6	7	2	..	..	1	..	2	2
11. Gainsborough	3	7	9	4	7	7	..	..	..	1	3	3
12. Grantham	10	13	3	3	6	5	..	..	..	1	2	2
13. Glandford Brigg	23	25	7	4	1	2	..	..	7	7	..	..
14. Hinckley	11	5	3	1	9	6	..	..	..	..	1	4
15. Holbeach	10	8	13	16	15	10	..	..	..	2	4	..
16. Horncastle	16	21	7	8	4	7	..	..	4	..	2	..
17. Leicester	12	9	19	23	10	13	..	..	2	1	2	3
18. Louth	11	11	5	7	7	7	..	..	2	2	..	6
19. Loughborough	10	18	5	1	10	10	..	..	..	..	7	4
20. Lincoln	23	19	10	12	2	..	..	..	2	2	2	1
21. Lutterworth	11	6	..	2	3	2	..	..	..	..	1	..
22. Market-Harborough	8	5	2	1	3	..	..	..	..	..	..	..
23. Mansfield	7	7	5	2	2	5	..	..	..	..	1	2
24. Melton Mowbray	8	8	4	13	..	..	..	..	..	..	2	4
25. Newark	12	10	7	4	8	9	..	..	5	2	4	4
26. Nottingham	49	38	21	15	20	15	..	..	4	4	3	..
27. Oakham	8	6	2	2	2	..	..	..	..	..	..	..
28. Radford	6	3	2	..	8	3	..	..	4	..	2	4
29. Shardlow	15	15	5	5	6	3	..	..	..	..	1	3
30. Sleaford	20	11	3	2	..	..	..	..	..	..	..	..
31. Spilsby	35	22	8	9	5	20	..	..	..	..	..	..
32. Spalding	9	5	20	8	4	1	..	..	3	..	2	3
33. Southwell	17	8	8	6	5	4	..	..	4	..	..	..
34. Stamford	8	6	6	10	3	1	..	..	..	..	..	..
35. Uppingham	6	6	3	2	1	2	..	..	..	..	3	3
36. Worksop	2	4	2	1	1	2	..	..	..	..	1	1
Total	478	401	215	197	203	166	..	..	47	30	71	73
Total of each class	879		412		369		..		77		144	

Thirty-six Unions, under the Superintendence of Mr. Senior, for the sixth Week ending March, 1840.

7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity.		8. Children of able-bodied Widows resident out of the Union Workhouse.		9. Children of able-bodied Widows resident in the Union Workhouse.		10. Children of able-bodied Widowers resident in the Union Workhouse.		11. Children of able-bodied Widowers resident out of the Workhouse.		12. Children of able-bodied Parents who are resident in the House with their Children.		13. Children belonging to large families of able-bodied Fathers, admitted into the House as relief to Parents.		14 Children not included in either of the above Classes.		Totals.
Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	
4	..	1	2	4	2	..	..	..	..	6	7	..	..	..	..	75
..	..	..	..	1	1	..	1	..	..	8	4	..	..	..	..	48
4	..	7	4	3	5	..	..	6	..	..	1	..	..	2	..	113
..	..	2	..	..	..	..	..	..	..	3	..	..	..	..	..	24
..	1	..	..	6	8	3	..	..	..	..	..	..	..	..	..	36
3	..	1	..	..	2	..	..	..	..	1	2	..	..	6	8	129
..	..	..	..	..	..	..	..	..	..	7	6	1	1	..	1	30
..	..	..	..	..	..	..	..	..	..	3	9	..	..	..	..	54
5	3	..	..	..	..	..	..	..	..	1	3	..	..	..	..	75
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	36
..	..	4	..	2	1	..	..	1	..	1	1	..	..	..	..	54
2	3	..	..	3	1	1	..	..	..	..	..	..	..	3	2	60
..	..	1	2	..	4	..	..	1	..	..	1	..	..	3	..	88
..	..	..	..	3	1	..	..	..	..	6	8	1	..	1	1	61
1	2	2	2	..	..	2	1	..	..	1	2	..	..	3	1	95
1	..	2	4	..	3	..	..	1	..	..	..	..	..	..	1	81
3	6	1	1	9	6	2	1	..	..	32	30	..	..	1	2	188
2	2	1	..	..	..	..	..	..	..	..	..	4	2	3	2	74
..	..	1	..	4	4	1	2	..	..	11	18	..	..	3	..	109
..	3	4	6	3	3	..	..	..	..	..	..	..	..	..	..	92
..	..	..	..	1	..	..	..	..	..	11	5	..	..	4	3	49
..	..	..	..	..	..	..	..	..	..	11	7	..	..	1	1	39
..	1	..	..	4	2	..	..	..	..	..	..	..	..	1	2	41
1	1	..	..	..	3	..	..	1	2	7	1	..	1	..	..	56
..	..	..	..	..	..	..	..	..	..	4	8	..	..	..	..	77
1	4	2	..	12	3	3	3	..	..	27	20	..	..	3	1	248
2	..	..	..	1	1	..	..	..	..	..	..	..	..	3	2	29
2	..	..	..	4	1	..	1	..	..	4	2	..	..	1	..	47
1	..	2	2	6	8	..	..	..	..	8	8	..	..	..	..	88
..	..	2	..	6	..	..	..	..	..	4	5	..	..	..	..	53
2	3	10	2	..	..	..	..	3	1	..	..	..	..	..	..	130
..	..	2	4	..	4	..	..	2	1	6	4	7	..	2	4	91
1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	56
..	..	4	1	3	1	..	..	2	..	..	..	..	..	..	..	45
2	3	..	..	..	..	..	..	..	..	3	1	..	..	..	..	35
..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
37	37	49	80	75	64	12	9	17	4	165	153	13	4	41	31	2622
74		79		139		21		21		318		17		72		2622

TABLE B.

A Return, showing the Name of the Schoolmaster and Schoolmistress, and Salaries in Thirty-six Unions under the Superintendence of Mr. Senior.

Name of Union.	Schoolmaster and Schoolmistress, married Couples.	Joint Salary.	Schoolmaster.	Salary.	Schoolmistress.	Salary	Total.	Observations.
		£.		£. s.		£.	£. s.	
1. Ashby de-la-Zouch	..	..	..	..	M. A. Mason .	15	15 0	
2. Barrow-on-Soar .	..	..	..	..	..	..	..	The children are at present taught by a pauper; on the completion of the workhouse, a schoolmaster will be appointed.
3. Basford . . .	..	..	—— Spencer .	20 0	..	..	20 0	
4. Bingham . . .	..	..	Edward Clifton	15 12	..	..	15 12	
5. Blaby	..	..	Thomas Harris	20 0	..	..	20 0	
6. Boston . . .	..	..	George Smart .	30 0	Jane Bromley.	20	50 0	The schoolmaster also acts as porter.
7. Bourne . . .	..	..	William Sewell	40 0	Eliza McGoldwick.	20	60 0	The schoolmaster also acts as relieving officer.
8. Caistor . . .	John Wilkinson and wife	40	..	..	..	..	40 0	
9. East Retford . .	..	..	..	..	Mary Durham	15	15 0	
10. Gainsborough. .	..	..	Joseph Lane .	55 0	Sarah Handley	15	40 0	
11. Glandford Brigg .	J. Wilmot & Ann Wilmot	60	..	..	..	..	60 0	
12. Grantham. . .	..	..	..	..	Ann Mears .	25	25 0	The boys attend the National school.
13. Hinckley . . .	Wm. Rowe and wife .	30	..	..	..	..	30 0	The wife of the porter teaches the children.
14. Holbeach . . .	..	..	Edmund Reaye	35 0	Ann Baker .	25	60 0	
15. Horncastle . .	Wm. Sims and wife . .	40	..	..	..	..	40 0	
16. Leicester . . .	G. W. Cartwright & wife	25	..	..	..	..	25 0	
17. Lincoln . . .	..	40	..	..	..	..	40 0	Offices at present vacant. Candidates advertised for.
18. Loughborough .	..	..	John James .	10 0	..	12	22 0	Office of schoolmistress vacant.
19. Louth	Wm. Flower and wife .	40	..	..	..	..	40 0	
20. Lutterworth . .	..	..	..	..	Mary Pettifer .	16	16 0	
21. Market Harboro'	..	..	John West. .	20 0	..	..	20 0	The schoolmaster also acts as porter.
22. Market Bosworth	..	..	..	..	..	..	..	The schoolmistress on trial. Salary not fixed.
23. Mansfield . . .	..	..	John Stephenson	26 0	..	..	26 0	
24. Melton Mowbray	T. M. Yeomans and wife	60	..	..	..	..	60 0	
25. Newark . . .	M. Wells and wife . .	35	..	..	..	..	35 0	
26. Nottingham . .	..	..	Thomas Kirley	70 0	E. Redgate .	20	90 0	
27. Oakham . . .	..	..	..	..	..	..	..	The children are taught by the matron.
28. Radford . . .	..	..	..	..	..	..	..	The children are taught by a pauper. The guardians propose appointing a schoolmaster.
29. Shardlow . . .	..	..	George Bucknall	19 0	..	..	10 0	
30. Sleaford . . .	John Newton and wife .	45	..	..	..	..	45 0	
31. Southwell . . .	..	..	..	..	Mary Elstone .	15	15 0	
32. Spalding . . .	Rob. Holland and wife.	60	..	..	..	..	60 0	
33. Spilsby . . .	..	..	T. Goodrick .	25 0	M. McGoodwick	25	50 0	
34. Stamford . . .	P. J. Freeman and wife.	60	..	..	..	..	60 0	
35. Uppingham . .	..	..	..	..	..	..	..	The children are taught by a pauper.
36. Worksop . . .	..	..	..	..	Mary Perkin .	15	15 0	
	Totals . £	535	£	346 0	£	238	1119 12	

TABLE C.—Showing the average Salary in the Nineteen Unions where both Schoolmaster and Schoolmistress are employed.

Name of Unions.	Salaries.
	£.
1. Boston	50
2. Bourne	60
3. Caiston	40
4. Gainsborough	40
5. Glandford Brigg	60
6. Hinckley	30
7. Holbeach	60
8. Horncastle	40
9. Leicester	25
10. Lincoln	40
11. Louth	40
12. Loughborough	22
13. Melton Mowbray.	60
14. Newark	35
15. Nottingham	90
16. Sleaford	45
17. Spalding	60
18. Spilsby	50
19. Stamford	60
Total . .	907
Average salary £47.	

TABLE D.—Showing the average Salary in the Six Unions where a Schoolmaster only is employed.

Name of Unions.	Salaries.
	£.
1. Basford	20
2. Bingham	15
3. Blaby	20
4. Market Harborough	20
5. Mansfield	26
6. Shardlow	10
Total . .	111
Average salary £18.	

TABLE E.—Showing the average Salary in the Six Unions where a Schoolmistress only is appointed.

Name of Unions.	Salaries.
	£.
1. Ashby-de-la-Zouch	15
2. East Retford	15
3. Grantham	25
4. Lutterworth	16
5. Southwell	15
6. Worksop	15
Total . .	101
Average salary £16.	

XII.

REPORT ON THE TRAINING OF PAUPER CHILDREN IN THE WORKHOUSES OF KENT, ETC.

By EDWARD CARLETON TUFNELL, Esq., Assistant Poor Law Commissioner.

GENTLEMEN, *Maidstone*, 25*th May*, 1840.

I ENCLOSE a return of the different classes of children that were in the workhouses of the forty-six Unions in my district on the 1st March last. I beg further to add reports from some Unions with respect to the condition of their schools. The following is from the Isle of Thanet Union.

SIR, *Isle of Thanet Union*, 18*th May*, 1840.

I AM instructed by the Board of Guardians to forward you the following statement in answers to the queries proposed in your letter of the 21st April last:—

1st. The moral state of the children on entering the house is very low; they are dirty in their habits, and disposed to lying, thefts, and swearing; this is no less the case of those whose parents have been reduced from better circumstances than of the very poorest.

2nd. The children upon entering into the house are found to be either utterly ignorant, or to have been very imperfectly instructed: out of about fifty children, from the age of six years and upwards admitted into the juvenile boys' and girls' schools since March, 1839, only six could read, and that but imperfectly.

3rd. Upon examination the schoolmaster reports that, "The means which have been adopted to train and educate the children are incessant watchfulness, private expostulations, and patient forbearance or exposure, and the reprobation of their fellows, which have rarely failed. No case of theft has occurred for some time; on the contrary, the children have their playthings, food, and even sugar, about without any fear of losing them." Toys and money are continually brought to the master in order that he may find the owners. Cases of lying are not frequent, and swearing is altogether repressed. Visitors to the school appear, by the Report Book, to be much gratified with the intelligence and general conduct of the children. The statement made by the schoolmaster more especially relates to the boys' schools, as he states, "That the great amount of time given by the schoolmistress to the superintendence of the industrial training has prevented her from giving a proper time to moral training in the playground, and to the necessary preparation of lessons for reli-

gious and intellectual instruction, and that the classification of the infants and juvenile girls is defective, and therefore injurious; that the contiguity of the girls' yard to that of the young women (where perpetual strife and sometimes disgraceful scenes occur before the eyes of the children), and communication between parents and children with the adults generally, is, in his view, extremely prejudicial to the morals of the children:" he finds much more difficulty with those children who have parents in the house than with others. The evil example of some of the elder children admitted into the house from time to time interrupts the course of sound and useful education.

The schoolmaster adds, "That the imperfect co-operation of the governor, arising from their relative positions, rendering it almost impossible that they should see things in the same light, occasions hindrances to effectual training in an adult establishment, for which he sees no remedy under the present arrangement of schools in each distinct Union house.

4th. We are of opinion that it would be of great importance to the training and educating children in a way beneficial for their temporal and eternal interests, in order to make them useful members of society, that a distinct school-house for boys, girls, and infants, upon the plan of the Norwood Institution, should be established in this division of the county, for the reception of the children of the several Union houses in it.

5th, 6th, 7th. In the year 1839 eighteen children went out into service, two only returned; the one when the period of service expired, the other discharged for idleness. In addition to the above the schoolmaster reports as follows: "Of the greater part of those who have left the house I have heard good accounts; some have written to me; where there have been failures they have been traced to early habits of idleness and depravity."

I am, sir,
Your most obedient servant,
WM. FREEMAN, *Clerk.*

The following evidence is from the schoolmaster of the Chailey Union.

The children on entering the house are generally in a weakly state, and frequently infected with itch, sore feet, hands, &c. The itch is frequently imperceptible on their entrance, but change of diet will in a few days cause it to appear in various parts of the body.

1st. With regard to their moral state, they are invariably ignorant of their Creator, and consequently given to lying and loose conversation. They possess no share of education whatever; and on entering the school I have not met with one under the age of nine who was able to read or answer a simple question from

Scripture, and but few who ever knew the alphabet perfectly. Those children above nine years of age are little better; and I have received no boy or girl who had made any further progress beyond that of attempting to read. I find upon inquiry this deficiency arises from the desertion or neglect of parents.

2nd. I have met with few instances where vicious propensities exist to any extent; two flagrant cases committed by girls of the ages of fourteen and sixteen, one of lying, another of thieving, were punished with confinement in a solitary room for six hours, after which they were placed on a stool in the centre of the school-room for the remainder of the day, with a placard attached to their persons, stating the nature of the offence committed. I took an opportunity during this portion of punishment to point out to the scholars assembled the degradation and fatal effects of such practices, which in both cases made an evident impression on the accused, but in one case only had the effect intended. In the other case, the girl of sixteen was, by permission of the Board of Guardians, removed to the able-bodied house; subsequently she was found to have stolen and taken away a cap and other things belonging to the mistress of this house. Both of these girls had returned from service with bad characters, and were previously inmates of the workhouse.

3rd. Generally speaking, no effect is produced by my exertions with children above the age of twelve years, which arises from their never having been properly checked for former misconduct; they therefore become indifferent as to the result, if detected. With children under the age of twelve I perceive a material difference. Although I found the whole of the inmates in a most rude state, and unacquainted with their duty towards God and each other, yet, by wholesome daily lessons in the gallery, from the Bible and New Testament, and various other kinds of instruction based on religion, they have become not only wiser but happier children. On their parents being allowed to visit them, I find they are exceedingly pleased to exhibit proofs of their advancement in learning, and their countenances bespeak an inward pleasure that they are acquiring more than they had been accustomed to do. I have had frequent instances where parents took occasion to express their gratitude for my care and attention to their children.

I can clearly perceive that the most neglected pauper children, if taken in time, can, in a few months, be brought to a sense of right and wrong, provided their instructor is careful in making an impression. I have been much gratified with their ready and cheerful manner of obeying the school-bell; I attribute this chiefly to the diversity of instruction which I have introduced (similar to that pursued at the Norwood school). I am satisfied my exertions produce harmony and good feeling, that the children

are in a much happier state of mind, that they see clearly the necessity of obedience, cleanliness, honesty, and industry.

4th. I find no trouble in educating and managing the whole of the children, although it considerably interferes with the duties of my situation as governor, having many things to see and be responsible for.

5th. Applications are frequently made for strong girls, but I have found none whom I could recommend. One or two have gone on trial, but turned out as I anticipated, worthless. Others, who were sent on approbation *previous*, have been returned to the workhouse since my appointment. Their mistresses or employers complain of indolence and dishonesty, which is accounted for on making inquiry as to their former habits while at home with their parents, where in most cases they have been neglected, and left to grow up in the most lamentable ignorance. Many of these girls are admitted into the workhouse at the age of twelve and fourteen during the temporary stay of their parents in the able-bodied house, and their propensities being by this time too deeply rooted, they cause unknown trouble to those who have the charge of them, and are eventually taken away without the slightest benefit but that of good advice, which causes a momentary impression only.

6th. I have had little opportunity of gaining information respecting their subsequent character and conduct after they have left the workhouse; but in some cases I find they fall into temptation and become prostitutes. I have had occasion for three temporary nurses from Chailey workhouse, one of whom is twenty years of age, and some time ago lost her place through misconduct. She was discovered under the barrack wall at Brighton in a destitute state. She procured an order for admission to the Chailey workhouse as a last resource. Notwithstanding these unfavourable circumstances, I find her exceedingly useful; can wash and bake well, as she has occasionally been obliged to do whilst other girls were suffering from typhus fever; but the great inconvenience and failing is, that the presence of the mistress is constantly required, otherwise she will neglect her work in order to gratify her indolent habits.

Generally speaking, the boys are much superior to the girls in point of industry and morality; and I use every precaution to employ the unruly girls as much as possible in household work, as their short stay precludes their receiving the advantages of moral training with the younger children.

The following is from the schoolmaster of the Tonbridge Union, 25th March, 1840:—

The moral state of the children on entering the workhouse, with some exceptions, is very indifferent, being much given to swearing and low conduct, and their amount of education very

small, many being nearly destitute of any. Their parents being too poor to be able to spare them in some cases, and in others great negligence is apparent; there are many exceptions, and those almost exclusively have had the advantages of their parish schools, which requires but little penetration on my part to discern.

With respect to the means used to reform the vicious, and the effect produced thereon: the means used are various, according to the disposition and propensities of the children; some I endeavour to shame out of their vices by pointing out to them those whose conduct is at variance with theirs; others are prevented as much as possible from mixing in play for a time with their schoolmates; some are made to walk round the playground whilst the rest are at their meals, are kept at home whilst the rest are enjoying a walk. Some who are in the practice of offering me their hand and bidding me good night as they are proceeding to their bedroom, I take the opportunity of commending if they deserve it, or with a look which they perfectly understand, or "how can you expect or think I can notice you after such conduct," I have had them follow me up stairs and beg forgiveness; I endeavour to make the most of this pleasing opportunity: thus at once I work upon their affections and gain power. A boy was much in the habit of walking by my side, and was generally very communicative in our walks: he much misconducted himself; I acted by him as with the boys going to bed, until he showed evident symptoms of reform. These, with many like ways too numerous to name, and which frequently occur at the moment required, are resorted to, in the like manner that a parent who has the real welfare of his children at heart would act, not forgetting, when required, the salutary advice of Solomon, however repugnant to the feelings. The effects are various, but upon the whole encouraging.

The greatest difficulties I have to encounter is with children when they first come in or go out for a short time and return, having mixed, as is generally the case with ours, with the lowest of the low, in railroad or such like employment: when they have been to an individual service it is mostly t' e reverse. For the improvement of the schools I would suggest that they go as little as possible to such work, and that, in addition to book-learning, a portion be employed under competent masters in some handicraft or agricultural employment; the girls to be taught not only needlework in addition to book-learning, but also washing, ironing, &c.

They are not readily taken into service, I think, for the want of such knowledge. Of five girls sent out, two returned from the inability of the parties to support them; one, though only fourteen years of age, was expected to wash for a large family, consequently was deficient in strength and knowledge; one stated that she had not sufficient food (which I do not credit), and the other

that she was ill used; these children are more tractable when they return, seeing thet they are better fed and treated in the house than out of it. I cannot help remarking that at the very time I am writing this, a boy (for there are always some of them about me), amongst other remarks, says, "Our boys don't get out much, Sir; if we had to work hard we should be glad to go." The condition of the children, as to their looks and conduct, is generally satisfactory: all above the age of five years, with few exceptions, can read, most of them write, many of them cipher, and all have some religious knowledge; the exceptions are those who have been much neglected, and have but recently come under my charge.

I have to observe that the children in taking their walks, and by the visits of their friends, frequently have pence given them; I encourage the practice of laying a portion of it aside, until it accumulates to a sufficiency to purchase something beneficial to their comforts; upwards of twenty boys, and nearly as many girls, have done so. I, of course, never enforce, but only stimulate them to it. If there was a fund to reward the teachers and some of the best conducted children, I think it would prove beneficial; the money to accumulate, and be given to them at one of the usual meetings by the committee, at some convenient time after they had been in a situation, with an addition for meritorious conduct.

I think it would prove beneficial to the children if they were kept entirely from the other classes, even after they come of age to be so removed, as I find them almost invariably the worse for such transfer, so quickly do taunts and bad example infect the youthful mind.

If a tailor and shoemaker were employed, which I think they might be beneficially, to do the work of the establishment, and instruct some of the boys, and others employed on the grounds, separate from the other classes, except with some aged and well-conducted men who would instruct them, and the girls had a convenient place set apart from the other classes to be instructed in washing, ironing, and the like, I feel assured that, while their mental instruction would tend to form religious minds and make them honest members of society, their industrial would not only benefit themselves, but their future employers.

I have the honour to be,

Gentlemen,

Your obedient servant,

EDWARD CARLETON TUFNELL.

TABLE respecting the Pauper Children resident in the Workhouses

Children divided into Classes.	NAME OF									
	East Ashford.		West Ashford.		Blean.		Bridge.		N. Aylesford.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1. Bastards	15	7	19	7	2	4	10	10	8	2
2. Orphans *.	4	2	4	9	4	..	10	10	9	4
3. Children deserted by father	..	..	7	4	4	..	4	3	2	1
4. Children deserted by mother, and whose fathers are resident out of Union workhouse, but have not deserted them.	..	..	..	..	..	..	..	..	..	..
5. Children deserted by father and mother.	..	..	..	..	..	2	3	2	4	1
6. Children of men undergoing punishment for crime.	5	8	4	11	..	..	..	..	..	..
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity.	..	..	5	9	2	..	5	4	1	1
8. Children of able-bodied widows resident in Union workhouse.	4	3	3	6	..	..	6	13	..	2
9. Children of able-bodied widows resident out of Union workhouse.	..	..	5	..	..	..	2	4	3	4
10. Children of able-bodied widowers resident in Union workhouse.	5	2	..	..	..	..	..	..	..	..
11. Children of able-bodied widowers resident out of Union workhouse.	..	..	2	..	..	..	..	..	..	..
12. Children of able-bodied parents who are resident in the Union workhouse with their children.	9	14	12	[illegible]	7	5	2	2	..	..
13. Children belonging to large families of able-bodied fathers, admitted into the workhouse as relief to parents.	..	..	5	2	..	..	..	..	..	..
14. Children not included in any of the above classes.	4	5	..	..	2	2	1	..	..	..
Total . . .	46	41	66	57	21	13	43	50	27	15
Total . . .	87		123		34		93		42	

of the Twenty-six Kent Unions on the 1st of March, 1840.

Union.															
Bromley.		Cranbrook.		Dartford.		Dover.		Eastry.		Elham.		Faversham.		Gravesend and Milton.	
Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
3	2	16	16	10	7	12	9	19	10	10	10	10	9	13	5
12	16	17	10	32	31	13	11	16	16	7	6	10	6	2	3
1	1	8	7	9	8	5	7	4	5	5	12	8	4	3	6
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
2	1	..	..	..	1	2	3	2	3	..	..	..	..	2	2
5	..	7	5	1	5	6	4	14	12	1	..	5	4	..	..
..	..	4	5	7	5	12	3	6	7	..	..	5	4	2	2
3	6	1	5	7	2	3	4	5	5	5	1	2	1	6	5
6	8	4	1	..	..	4	5	3	4	1	..	..	..	4	..
..	..	1	..	1	..	..	..	6	..	..	..	..	..	..	..
..	..	2	2	..	..	..	..	1	1	..	..	..	..	1	1
6	5	4	6	1	2	17	15	14	15	5	2	29	9	1	..
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	1	..	..	..	1	4	..	..	1	..
38	39	64	58	68	61	75	61	90	78	35	35	69	37	36	24
77		122		129		136		168		70		106		60	

TABLE respecting the Pauper Children resident in the Workhouses

Children divided into Classes.	NAME OF									
	Hollingbourne.		Hoo.		Maidstone.		Malling.		Medway.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1. Bastards	24	25	5	2	15	15	6	4	20	18
2. Orphans	13	17	1	1	27	30	9	12	7	18
3. Children deserted by father	..	4	2	3	9	13	12	7	16	16
4. Children deserted by mother, and whose fathers are resident out of Union workhouse, but have not deserted them.	..	2	..	..	2	..	..	..	..	..
5. Children deserted by father and mother.	..	..	..	..	..	..	1	1	14	8
6. Children of men undergoing punishment for crime.	1	..	..	2	4	7	2	2	2	4
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity.	..	..	5	1	1	..	1	1	5	10
8. Children of able-bodied widows resident in Union workhouse.	7	7	..	..	15	10	6	5	3	6
9. Children of able-bodied widows resident out of Union workhouse.	7	1	..	..	6	..	16	4	..	..
10. Children of able-bodied widowers resident in Union workhouse.	6	5	..	..	6	4	1	2	..	..
11. Children of able-bodied widowers resident out of Union workhouse.	1	2	..	..	..	..	13	4	..	2
12. Children of able-bodied parents who are resident in the Union workhouse with their children.	15	12	..	..	16	18	12	9	4	5
13. Children belonging to large families of able-bodied fathers admitted into the workhouse, as relief to parents.	11	9	..	..	..	..	..	..	4	9
14. Children not included in any of the above classes.	7	13	..	..	6	5	2	5	..	..
Total . . .	97	92	13	9	107	102	81	56	75	96
Total . . .	189		22		209		137		171	

Union.														
Milton.		Romney Warsh.		Oaks.		Sheppey.		Tenterden.		Thanet, Isle of.		Tonbridge.		Total.
Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	
9	11	8	8	17	23	2	5	20	14	15	12	15	23	561
7	8	15	6	9	6	8	6	6	12	20	18	16	7	543
5	4	..	..	31	20	3	3	5	3	7	15	15	9	320
..	..	..	..	..	..	..	..	..	..	..	..	..	2	7
5	7	..	..	2	2	7	4	1	..	..	1	..	3	86
1	2	3	1	8	4	..	..	6	3	4	3	7	6	169
..	..	4	3	..	..	4	4	2	2	10	4	3	4	153
15	10	..	..	3	3	5	8	2	5	10	10	2	1	232
..	..	2	5	2	1	..	..	..	..	3	1	4	2	112
1	2	..	..	3	2	..	..	..	..	..	..	2	2	51
..	..	..	..	..	..	..	..	2	..	..	..	5	..	39
11	11	1	..	12	9	2	10	26	24	9	13	11	17	438
..	..	..	2	..	..	..	..	..	..	3	1	7	4	58
..	..	..	..	4	3	..	..	1	1	..	..	11	8	87
54	55	33	25	91	73	31	40	71	64	81	78	98	88	2856
109		58		164		71		135		159		186		

TABLE respecting the Pauper Children resident in the

Children divided into Classes.	NAME OF									
	Battle.		Chailey.		Cuckfield.		Eastbourne.		East Grinstead.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1. Bastards	21	14	7	7	7	9	9	15	12	8
2. Orphans	3	8	2	3	6	4	3	2	4	9
3. Children deserted by father	5	2	4	2	5	10	..	..	7	11
4. Children deserted by mother, and whose fathers are resident out of Union workhouse, but have not deserted them.	..	..	..	1	2	2	..	..	..	..
5. Children deserted by father and mother.	6	5	..	1	..	..	5	6	..	..
6. Children of men undergoing punishment for crime.	9	3	5	9	..	1	10	6	1	1
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity.	..	..	1	..	6	1	..	..	2	2
8. Children of able-bodied widows resident in Union workhouse.	4	3	2	1	..	1	..	1	6	3
9. Children of able-bodied widows resident out of Union workhouse.	14	6	..	1	3	2	..	..	12	3
10. Children of able-bodied widowers resident in Union workhouse.	..	1	..	1	..	..	4	3	..	..
11. Children of able-bodied widowers resident out of Union workhouse.	6	..	5	2	3	4	..	..	..	..
12. Children of able-bodied parents who are resident in the Union workhouse with their children.	18	20	12	12	1	2	25	33	1	4
13. Children belonging to large families of able-bodied fathers admitted into the workhouse as relief to parents.	4	7	2	3	..	..	3	..	7	8
14. Children not included in any of the above classes.	1	1	1	..	..	..	..	..	1	..
Total . . .	70	91	41	43	33	36	59	66	53	49
Total . . .	161		84		69		125		102	

Workhouses of the Sussex Unions on the 1st March, 1840.

Union.	Hailsham.		Hastings.		Horsham.		Lewes.		Newhaven.		Rye.		Steyning.		Thakeham.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
	24	16	9	8	13	11	12	8	5	1	14	14	6	2	11	4
	18	11	1	3	8	4	4	8	3	4	11	13	8	2	5	4
	5	3	3	1	13	11	8	11	1	..	6	6	2	2	4	3
	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
	1	1	..	..	..	..	..	1	2	..	2	..	..	..	1	..
	..	..	..	..	1	..	1	2	..	1	1	2	..	..	8	..
	..	2	..	..	1	..	1	..	..	..	..	..	1	1	11	7
	8	6	1	2	1	2	2	4	..	..	9	5	1	1	1	2
	..	..	5	4	2	1	..	..	..	..	7	1	1	1	..	..
	9	11	..	..	2	2	5	1	2	1	..	..	..	..	3	2
	3	..	1	..	4	..	6	1	..	..	..	..	..	..	..	..
	25	23	..	..	7	8	..	..	6	3	13	11	14	15	14	7
	..	1	4	1	8	4	6	2	..	..	2	4	..	..	..	..
	6	3	2	1	3	3	..	2	1	2	..	24	..	1	..	..
	99	77	26	20	63	46	46	40	20	12	66	80	33	25	58	29
	176		46		109		86		32		146		58		87	

TABLE respecting the Pauper Children of the Sussex Unions—*continued*.

Children divided into Classes.	Name of Union.						
	Ticehurst.		Uckfield.		Westfirle.		Total.
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	
1. Bastards	12	17	24	10	3	8	341
2. Orphans	10	3	12	12	5	2	193
3. Children deserted by father	7	8	3	5	3	1	152
4. Children deserted by mother, and whose fathers are resident out of Union workhouse, but have not deserted them.	2	1	..	2	..	..	12
5. Children deserted by father and mother.	2	..	..	..	1	..	34
6. Children of men undergoing punishment for crime.	1	..	5	2	..	..	69
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity.	1	..	..	..	1	..	38
8. Children of able-bodied widows resident in Union workhouse.	1	1	2	2	..	..	72
9. Children of able-bodied widows resident out of Union workhouse.	1	..	9	3	1	1	78
10. Children of able-bodied widowers resident in Union workhouse.	..	..	5	3	..	..	55
11. Children of able-bodied widowers resident out of Union workhouse.	..	..	2	..	..	..	37
12. Children of able-bodied parents who are resident in the Union workhouse with their children.	6	3	22	12	4	10	330
13. Children belonging to large families of able-bodied fathers admitted into the workhouse as relief to parents.	..	..	1	8	3	3	81
14. Children not included in any of the above classes.	..	..	5	4	..	4	65
Total . . .	43	33	90	63	21	29	1557
Total . . .	76		153		50		

TABLE respecting the Pauper Children resident in the Workhouses of the SURREY UNIONS on the 1st March, 1840.

Children divided into Classes.	Name of Union.										
	Croydon.		Dorking.		Epsom.		Godstone.		Reigate.		Total.
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	
1. Bastards	16	14	7	6	12	11	3	4	4	12	79
2. Orphans	12	4	6	..	8	7	2	6	7	10	62
3. Children deserted by father	6	3	4	6	3	2	1	2	..	..	27
4. Children deserted by mother, and whose fathers are resident out of Union workhouse, but have not deserted them.	..	..	..	..	..	..	..	..	..	..	..
5. Children deserted by father and mother.	..	..	..	..	1	3	..	..	5	1	8
6. Children of men undergoing punishment for crime.	..	..	1	..	2	1	..	..	1	1	6
7. Children of persons dependent on parochial aid, on account of mental or bodily infirmity.	9	13	2	..	..	..	..	..	..	..	24
8. Children of able-bodied widows resident in Union workhouse.	2	2	..	..	..	..	3	..	3	6	16
9. Children of able-bodied widows resident out of Union workhouse.	2	2	..	3	1	..	..	..	6	3	17
10. Children of able-bodied widowers resident in Union workhouse.	..	..	1	2	..	..	..	..	4	6	13
11. Children of able-bodied widowers resident out of Union workhouse.	..	..	..	1	..	..	..	..	1	1	3
12. Children of able-bodied parents who are resident in the Union workhouse with their children.	..	..	8	6	9	4	..	..	13	15	55
13. Children belonging to large families of able-bodied fathers admitted into the workhouse as relief to parents.	2	3	1	4	..	..	..	..	..	1	11
14. Children not included in any of the above classes.	..	..	2	..	2	2	..	..	..	..	6
Total . . .	49	41	32	28	38	30	9	12	42	56	327
Total . . .	90		60		68		21		98		

XIII.

REPORT ON THE TRAINING OF PAUPER CHILDREN IN THE NORTH OF ENGLAND.

By Sir JOHN WALSHAM, Bart., Assistant Poor Law Commissioner.

Newcastle-upon-Tyne, 30*th March*, 1840.

GENTLEMEN,

HAVING duly received your directions to furnish you with a report on the state of the workhouse schools in my district, I framed a circular embodying the points on which information appeared necessary, and transmitted it on the 11th ultimo to thirty-one out of the thirty-six Unions which I have in charge.

I did not address such circular to the remaining five Unions; viz., Bellingham, Haltwhistle, Easington, Sedgefield, and Rothbury, because in the two latter there were only three or four children, and in the two former the workhouses were yet unfinished, whilst the few in-door paupers belonging to Easington are at present maintained in the Houghton workhouse.

The thirty-one Unions from which I have received returns may be conveniently divided, having regard to population, into three classes:—

A. The first class would comprise the ten Unions of,—

1. Berwick.	6. Morpeth.
2. Carlisle.	7. South Shields.
3. Cockermouth.	8. Sunderland.
4. Gateshead.	9. Tynemouth.
5. Hexham.	10. Whitehaven.

And from these ten Unions I have selected five (as being important localities of which the educational arrangements and progress must be always matter of considerable interest), in order to lay before you, under the head of *Enclosure* 1, the whole of the reports which I have received from the clerks of the Berwick, Carlisle, Hexham, Sunderland, and Whitehaven Unions; to which reports, and more particularly to those from Berwick and Carlisle, I would therefore request your attention; the Berwick Union being, perhaps, the only one in my district where, owing to circumstances that I shall have shortly occasion to mention, the education of pauper children according to the plan developed under your sanction at Norwood has been practically commenced.

With reference to the five remaining Unions of Cockermouth, Gateshead, Newcastle, South Shields, and Tynemouth, the new

workhouses of the three former Unions are as yet incomplete and the educational arrangements provisional.

In Cockermouth the children are partly educated in the poor-houses of Cockermouth and Workington, and partly at a school of industry, and are reputed to improve much in moral conduct and behaviour after their admission; in Gateshead they attend the national, and in Newcastle the parochial schools; and although separated from the adults, as far as possible, *in the latter Union,* the common occurrences of a poorhouse are admitted by the authorities of both Unions to be unfavourable to their moral training.

The report of the Sunderland Union will strictly apply, *mutato nomine,* to the educational circumstances of the South Shields workhouse; and in the Tynemouth workhouse, the schooling of the children is conducted by a decayed schoolmaster, and not without success, though much after the old fashion of parish schools. Corporal punishment is not, however, resorted to, and here, as in other Unions* where the education proceeds at home, the only rewards assigned to the combination of intellectual proficiency and general good conduct consist in the child's being placed at the head of his or her class.

B. The second class would comprise the fourteen Unions of—

1. Alnwick.	8. Glendale.
2. Auckland.	9. Houghton.
3. Castle Ward.	10. Morpeth.
4. Chester le Street.	11. Penrith.
5. Darlington.	12. Stockton.
6. Durham.	13. Teesdale.
7. East Ward.	14. Wigton.

And as illustrating, fairly enough, the average educational arrangements which obtain among these Unions, I have added to the five reports already included in Enclosure 1, those from the clerks of the Castle Ward and Teesdale Unions. With reference to the remaining twelve Unions, I may sum up the substance of the returns which I have before me, by stating that, in the Auckland, Chester le Street, Darlington, Durham, Houghton, Morpeth, and Stockton workhouses, the children attend the national, infant, and other schools open to the children of the independent poor in their respective neighbourhoods, and are educated by pauper schoolmasters in the Alnwick, East Ward, and Penrith workhouses, and by the master of the workhouse in Glendale. The Wigton workhouse is not finished; but such children as are in the poor-houses now in use attend the adjoining parish schools.

* Except at Longtown, where Sir James Graham, the Chairman, gives premiums for good conduct and progress.

In all these Unions (if the workhouses have been completed) a twofold, and generally a fourfold, classification is everywhere in operation; but the children are, notwithstanding, so intermingled at times with the adults, that evil is avowedly apprehended from such unavoidable communication, more especially between the women and girls; and I take this opportunity of drawing your Board's attention to the startling fact, that in the Sunderland, South Shields, Morpeth, Wigton, and other Unions, (where previously to their formation the separation of the girls from the women was unknown, or scarcely enforced,) it has hitherto been observable by the authorities, that although the boys educated in the workhouses and sent from thence to service or trades are rarely known to turn out ill, the girls continually become depraved and pauperized.

C. The third class would comprise the seven Unions of.—

1. Alston.	4. Lanchester.
2. Belford.	5. Longtown.
3. Brampton.	6. Weardale.
7. West Ward.	

And of the practice in these Unions relative to the education of the workhouse children, the report from Longtown (annexed to the others in Enclosure 1) may be deemed to afford a favourable example.

In the Belford, Brampton, and Weardale Unions, the children attend the national, and in the Alston and Lanchester Unions the endowed village schools. In the West Ward Union the tuition is directed by the master of the workhouse, who was formerly a schoolmaster; and in each of the six last named Unions the children mix, according to their respective sexes, with the adults, the classification being merely two-fold.

Having thus gone through my list of Unions *seriatim*, in order to furnish a sort of general view of their instructional arrangements, it will be well for me now to state that, bearing in mind their comparatively unpauperized condition previously to being brought into Union, and how unlikely it consequently was that among the inmates of their several workhouses there would be found *during the first three or four years children in sufficient numbers* to require the services, or rather to justify to the public the salaries, of competent teachers, my chief aim has hitherto been to provide as effectually for the training of the pauper children in the Unions under my superintendence as the various circumstances of the district, and the obviously necessary postponement of any permanent educational organization would permit.

To such postponement I was the more induced to recommend

your consenting, by my anxious hope that facilities for the combination of Unions in advancement of the all-important objects involved in the industrial and educational training of pauper children would sooner or later be granted by Parliament; and in this hope (sanctioned by your approval) I have hitherto arranged that the children in the majority of my workhouses should attend, principally the national, and occasionally the endowed and infant, schools of the towns in or near which those workhouses were situated; thereby ensuring a fair amount of educational progress to the children, at the same time that I avoided creating the additional obstacles to the future introduction of an enlarged system, which the appointment of an ill-paid staff of uneducated workhouse teachers would have interposed.

I have not, however, deemed it right (where the guardians wished it, and the teachers were respectable in their degree) to interfere, except at Berwick, with the in-door education afforded by decayed or pauper schoolmasters; and indeed the local peculiarities of some Unions (as for instance of Longtown, Castle Ward, Glendale, &c.) require that either the master and matron, or some competent inmates of the workhouse, should undertake the instruction of the children. Of the nature and extent of this inexpedient and defective method of education, some of the reports I have already mentioned, in conjunction with the table I have annexed under the head of Enclosure 2 B, will possess you more in detail, while a reference to the table marked Enclosure 2 A must at once prove that, with the (doubtful) exception of the ten Unions of Berwick, Carlisle, Cockermouth, Hexham, Newcastle, Penrith, Sunderland, Tynemouth, Whitehaven, and Wigton, it is hopeless to look for any systematic improvement in the training of pauper children, unless means be conceded to the Commission for the discretionary combination of Unions.

In Berwick workhouse alone (and that but recently) is the educational department established on a sound foundation; in Carlisle and Whitehaven the appearance and manners of the children, and the progress made by them, are highly satisfactory and creditable; still the teachers (meritorious men in their way) are of the pauper class, and on the objections inseparable from this arrangement I need not dwell.

In Cockermouth, Newcastle, and Wigton, the workhouses (as I have already observed) are unfinished, and the educational arrangements are therefore, for the present, of a purely transition character; but although I have enumerated Hexham, Penrith, Sunderland, and Tynemouth among the Unions which from the numbers of children in the respective workhouses might be induced to place their instructional training on a better footing, those numbers are, nevertheless, of mere comparative largeness,

and quite inadequate of themselves to do more than constitute the nucleus of a really effective school; and if the term "school" be used to signify a place in which industrial as well as literary knowledge may be imparted, I have scarce a Union in charge where the admirable system in force at Norwood could be attempted with the slightest prospect of successfully vindicating the needful cost in the eyes of the guardians and rate-payers.

In all my workhouses the girls are instructed in household work, in sewing, knitting, &c., and in the Carlisle Union, the proficiency in sewing and knitting of girls only six years old is remarkable: but beyond the use of the spade in the workhouse garden, or of the hammer in breaking stones, no other means are employed, or indeed exist, for teaching the boys a useful trade, than by binding them out, with or without a money premium, (*Vide* Enclosure 2 B,) to shoemakers, tailors, smiths, mariners, &c., at the age of eleven or twelve years.

In short, without the power of congregating the children of several Unions together in a district school, I see not how their educational and industrial training can ever be, in this district, very satisfactorily managed; it would, however, be idle in me to take up your time by dilating on topics which have been already handled in so masterly a manner by my friends and colleagues, Dr. Kay and Mr. Tufnell; I would not weaken, by my imperfect and superfluous advocacy, the force of expositions and suggestions in whose truthfulness and far-sightedness I entirely concur; and yet, in regard to one, the most material feature of this vital question, I may not refrain from expressing my firm conviction that, inasmuch as the notorious return of girls to the workhouses in consequence of misconduct cannot but be attributable to the evil habits acquired by their previous intercourse with the women, and as none of the northern workhouses possess more than a four-fold, and too many only a two-fold classification, it is impossible to overrate the *religious and moral* (rather than the merely secular) importance of arrangements which shall absolutely separate the children from the adults. And following up this view of the subject, I would wish you to notice that of the 1204 children in the workhouses of my district (and be it remarked, the collective inmates of these workhouses do not much exceed 3000), no less than 850 are either bastards, orphans, or deserted by their parents; and that, consequently, to more than two-fourths of the whole number of children, the supposititious hardship of separation from their families could not apply; but even if it did, and if the one conclusive and often-urged fact, that the children of the highest classes undergo a similar separation, be deemed too light, I would throw into the balance, to make up the weight required, this second fact, that wherever the mothers

and their children inhabit the same workhouse, those children are (téstibus the Carlisle and other guardians) the most idle and unhealthy looking in the establishment.

I do not think that what little more I might add to this letter requires my trespassing longer on your valuable time. The eight reports which are contained at length in Enclosure 1, and the two tables which I annex as Enclosure 2, present together a certain amount of information in detail which may be relied upon as furnishing accurate indices of the state of the workhouse schools in my district, so far as the various points whereon you requested my observations are connected with such schools.

Having, however, dwelt much on the present insufficient separation of the children from the adults, as well as upon the desirableness of substituting a new and more powerful machinery for the arrangements which now bear on the training of these children, I am bound to state to you, in conclusion, that as of separation *under the old system* there was none at all (unless partially at Newcastle and Sunderland), a most extensive change for the better has been accomplished *under the new system* in these respects; though such change has, no doubt, fallen short of complete effectiveness: and in regard to education, although for the reasons I have adduced I deem a radical amendment needful in the system on which we are still proceeding, I am further bound to state that, as between the present and the past, very great and beneficial improvements have, and are taking place.

I have the honour to be, gentlemen,
Your very obedient servant,
JOHN WALSHAM,
Assistant Commissioner.

To the Poor Law Commissioners.

ENCLO

[Supplement to Sir JOHN WALSHAM'S REPORT

TABLE showing the Number of Children now resident within the Workhouses of the aggregate of Boys

		Alnwick.	Alston.	Auckland.	Belford.	Berwick-upon-Tweed.	Brampton.	Carlisle.	Castle Ward.
1. Bastards	Boys	3	9	5	1	..	11	15	2
	Girls	4	2	7	..	7	6	7	4
2. Orphans	Boys	3	1	..	..	4	2	42	1
	Girls	1	..	..	..	4	1	9	3
3. Children deserted by father	Boys	1	3	..	..	..	2	8	..
	Girls	1	1	..	..	..	1	14	..
4. Children deserted by mother, and whose fathers are resident out of the Union workhouse, but have not deserted them.	Boys	..	..	..	..	..	..	..	..
	Girls	..	..	..	..	..	..	..	..
5. Children deserted by father and mother . . .	Boys	..	..	..	..	2	..	..	..
	Girls	..	..	..	..	..	1	..	..
6. Children of men undergoing punishment for crime	Boys	..	..	..	..	1	1	..	..
	Girls	..	..	..	..	..	..	..	..
7. Children of persons dependent on parochial aid on account of mental or bodily infirmity . . .	Boys	..	..	..	..	1	..	6	..
	Girls	..	..	..	..	..	1	2	..
8. Children of able-bodied widows resident in Union workhouse	Boys	..	..	..	..	1	..	1	..
	Girls	..	..	..	..	3	..	1	..
9. Children of able-bodied widows resident out of Union workhouse . .	Boys	..	..	..	2	..	..	..	..
	Girls	..	..	..	..	..	..	..	..
10. Children of able-bodied widowers resident in Union workhouse . .	Boys	..	..	1	..	..	..	..	..
	Girls	..	..	..	..	..	..	..	..
11. Children of able-bodied widowers resident out of Union workhouse . .	Boys	..	..	..	..	..	..	..	..
	Girls	..	..	..	..	..	..	..	..
12. Children of able-bodied parents who are resident in the Union workhouse with their children . .	Boys	..	..	2	..	..	..	5	2
	Girls	..	..	..	..	..	..	6	2
13. Children belonging to large families of able-bodied fathers admitted into the workhouse as relief to parents	Boys	..	..	..	..	1	..	..	..
	Girls	..	..	..	..	1	..	..	..
14. Children not included in either of the above classes	Boys	3	..	..	..	8	..	6	..
	Girls	..	..	..	..	9	..	3	..
Totals . . .		16	16	15	3	42	26	131	14

SURE 1.

on the state of Workhouse Schools.]

undermentioned Unions in Sir John Walsham's District, and amounting, in the and Girls, to 1,204.

Castle le Street.	Cockermouth.	Darlington.	Durham.	East Ward.	Gateshead.	Glendale.	Hexham.	Houghton le Spring.	Lanchester.	Longtown.	Morpeth.	Newcastle-upon-Tyne.	Penrith.	South Shields.	Stockton.
4	11	11	5	7	5	2	17	..	1	8	6	18	15	1	3
4	16	7	2	5	14	4	21	..	3	10	4	19	9	2	3
1	8	2	..	..	2	3	5	..	..	2	..	22	11	1	6
1	11	..	1	2	6	2	2	..	..	3	..	21	7	4	6
3	9	1	..	1	..	..	..	1	..	1	3	1	3	1	1
1	8	1	1	..	2	..	4	1	..	1	1	8	4	4	5
..	..	..	1	..	3	..	..	..	..	..	..	3	..	..	1
..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..
..	3	..	1	..	..	..	..	..	..	..	..	2	..	..	..
..	1	..	..	..	..	..	..	..	..	4	2	1	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
1	2	..	1	..	2	..	1	..	..	1	..	6	2	1	1
..	3	..	..	..	3	..	1	..	..	1	..	3	..	2	..
..	5	..	..	4	..	..	2	..	..	..	..	7	..	..	..
..	2	..	..	3	..	..	2	..	..	1	..	1	..	1	..
..	3	..	..	..	..	1	1	..	..	..	..	5	1	..	..
..	5	..	..	..	..	1	3	..	..	..	..	4	3	..	2
..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..
..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	2	..	..	..	..	..	..	..	..	..	5	4	..	..
..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..
..	3	1	1	..	..	..	..	..	..	..	..	1	..	..	..
15	95	25	14	22	38	13	59	2	4	32	16	142	66	18	28

TABLE showing the Number of Children now resident within the Workhouses of the undermentioned Unions in Sir John Walsham's District, and amounting, in the aggregate of Boys and Girls, to 1,204—*continued.*

—		Sunderland.	Teesdale.	Tynemouth.	Weardale.	West Ward.	Whitehaven.	Wigton.	Total Number of Boys.	Total Number of Girls.
1. Bastards	Boys	5	12	7	3	3	24	10	224	..
	Girls	9	9	5	2	2	24	4	..	215
2. Orphans	Boys	15	1	5	..	1	21	5	164	..
	Girls	12	2	5	..	..	18	3	..	124
3. Children deserted by father	Boys	1	..	2	2	2	..	3	49	..
	Girls	1	..	1	2	1	..	..	..	63
4. Children deserted by mother, and whose fathers are resident out of the Union workhouse, but have not deserted them	Boys	..	..	..	..	..	..	1	9	..
	Girls	..	..	..	..	..	..	..	..	2
5. Children deserted by father and mother	Boys	2	2	..	..	..	1	..	13	..
	Girls	..	..	..	..	..	..	..	..	10
6. Children of men undergoing punishment for crime	Boys	..	..	..	..	..	2	..	7	..
	Girls	2	..	..	..	..	5	..	..	9
7. Children of persons dependent on parochial aid on account of mental or bodily infirmity	Boys	1	..	..	1	..	..	..	27	..
	Girls	1	..	..	..	..	..	3	..	20
8. Children of able-bodied widows resident in Union workhouse	Boys	1	1	4	..	1	3	..	33	..
	Girls	..	6	4	..	..	..	..	..	27
9. Children of able-bodied widows resident out of Union workhouse	Boys	..	1	5	..	..	1	..	20	..
	Girls	..	..	3	..	..	1	2	..	24
10. Children of able-bodied widowers resident in Union workhouse	Boys	..	..	..	..	..	..	..	4	..
	Girls	..	..	..	..	..	..	..	..	2
11. Children of able-bodied widowers resident out of Union workhouse	Boys	..	..	..	..	..	2	2	7	..
	Girls	..	..	..	..	..	..	..	..	3
12. Children of able-bodied parents who are resident in the Union workhouse with their children	Boys	..	1	..	..	2	..	12	35	..
	Girls	..	..	..	..	1	..	10	..	23
13. Children belonging to large families of able-bodied fathers admitted into the workhouse as relief to parents	Boys	..	..	..	..	..	..	1	4	..
	Girls	..	..	..	..	..	..	..	..	3
14. Children not included in either of the above classes	Boys	7	12	7	..	..	..	..	46	..
	Girls	5	6	8	..	..	..	..	..	37
Total		62	53	56	10	13	102	56	642	562

ENCLOSURE 2 (B).

[Supplement to Sir John Walsham's Report on the state of Workhouse Schools.]

TABLE showing the practice as to the Schooling and subsequent Apprenticing of the Orphans or Friendless Children in the Workhouses of Sir John Walsham's District.

Names of Unions.	Regular Schoolmaster appointed with Salary.	Regular Schoolmistress appointed with Salary.	Broken-down Teachers appointed with Salaries or Gratuities.	Master and Matron of Workhouse act as Teachers.	Pauper Inmates act as Teachers.	Children attend National Schools.	Children attend endowed and other Schools	Outfit in Clothes and Money; Premiums (of £2 to £5) given on binding out Boys to Trades.	Outfit in Clothes given on putting Girls to place.	Outfit in *Clothes only* of the average value of 30*s*. given on sending out Children of both sexes.
Alnwick	..	..	..	..	×	..	..	×	×	..
Alston	..	..	..	..	..	..	×	..	..	×
Auckland	..	..	..	..	..	×	..	..	..	×
Belford	..	..	..	×	..	×	..	..	..	..
Berwick-upon-Tweed	×	..	..	..	..	..	..	×	×	..
Brampton*	..	..	..	..	..	×	..	..	..	×
Carlisle	..	×	..	..	×	..	..	×	×	..
Castle Ward	..	..	..	×	..	..	..	..	×	..
Chester le Street	..	..	..	..	..	..	×	..	..	×
Cockermouth †	..	×	..	..	..	..	×	..	..	×
Darlington	..	..	..	..	..	×	..	..	..	×
Durham	..	..	..	..	..	×	×	..	..	×
East Ward	..	..	×	..	..	..	..	..	..	×
Gateshead	..	..	..	..	..	×	×	×	×	..
Glendale	..	..	..	×	..	..	..	..	..	..
Hexham	..	×	..	..	..	..	×	..	..	×
Houghton le Spring	..	..	..	..	..	×	..	×	×	..
Lanchester	..	..	..	..	..	..	×	..	..	..
Longtown	..	..	..	..	×	..	..	..	..	×
Morpeth	..	..	..	..	..	..	×	..	..	×
Newcastle-upon-Tyne	..	..	..	..	..	..	×	×	×	..
Penrith	..	..	..	..	×	..	..	..	..	×
South Shields	..	..	..	..	..	×	..	..	..	×
Stockton	..	..	..	..	..	×	×	..	..	×
Sunderland	..	..	..	..	..	×	..	×	×	..
Teesdale *	..	..	..	..	..	×	..	×	..	..
Tynemouth	..	..	×	..	..	..	..	×	×	..
Weardale †	..	..	..	..	..	×	..	..	..	×
West Ward	..	..	..	×	..	..	..	..	..	×
Whitehaven	..	..	..	..	×	..	..	..	..	×
Wigton	..	..	..	..	..	..	×	..	..	×
Total	1	3	2	4	5	12	11	9	9	18

* A weekly payment of 1*s*. to 1*s*. 6*d*. is given for a time on sending children from the *Brampton* and *Teesdale* workhouses to occupations of which they were previously ignorant.

† In the *Cockermouth* and *Weardale* Unions a money premium is sometimes, but very rarely, given.

MEM.—Subsequent aid in clothing is rarely if ever given in any Union.—J. W.

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